

Cefas Report (C6064)

## Assessment of the Torbay Biogenic Reef within the Lyme Bay and Torbay cSAC

**Authors: Joanna Murray & Paul Whomersley** 

Issue date: March 2014



## **Cefas Document Control**

## Title: Assessment of the Torbay Biogenic Reef within the Lyme Bay and

## **Torbay cSAC**

Submitted to:	Natural England	
Date submitted:	17th January 2014	
Project Manager:	Joanna Murray	
Report compiled by:	Joanna Murray	
Quality control by: Paul Whomersley and Robin Law		
Approved by & date:	: 17th January 2014	
Version: 2		

Version Control History			
Author	Date	Comment	Version
Murray & Whomersley	17/01/2014	Final draft delivered to Natural England	V1
NE	07/02/2014	Comments received from NE	V1.1
Murray & Whomersley	21/02/2014	Final report delivered to NE	V2
NE	25/02/2014	Final comments received from NE	V2
Murray & Whomersley		Final delivery	V3

# Assessment of the Torbay Biogenic Reef within the Lyme Bay and Torbay cSAC

**Authors: Joanna Murray & Paul Whomersley** 

Issue date: March 2014



#### **Head office**

Centre for Environment, Fisheries & Aquaculture Science Pakefield Road, Lowestoft, Suffolk NR33 0HT, UK Tel +44 (0) 1502 56 2244 Fax +44 (0) 1502 51 3865 www.cefas.defra.gov.uk

Cefas is an executive agency of Defra

## **Executive Summary**

- 1. This report describes the results of a field survey aimed at identifying the presence and extent of the 'biogenic reef feature 'in the Torbay area of the Lyme Bay and Torbay Candidate Special Area of Conservation (cSAC). The survey (DB01\_13) was conducted aboard the Drumbeat of Devon in partnership with the Devon and Severn Inshore Fisheries Conservation Authority (IFCA) during the 25<sup>th</sup> and 26<sup>th</sup> September 2013 and the 4<sup>th</sup> October 2013 on behalf of Natural England (NE).
- 2. Ground-truthing sample locations, intended to identify the presence and extent of Mytilus edulis beds on sediment, were identified using indicative signatures from existing acoustic datasets alongside previous point data records and local knowledge. Ground-truthing techniques included the acquisition of video and still images of the seabed, the results of which are presented in this report.
- 3. Thirty one video stations and 461 corresponding still images were acquired across the Torbay area of the Lyme Bay and Torbay cSAC during the survey. A range of habitats were observed during video tows, ranging from rippled sand to mosaics of boulders and rock on shelly, gravelly sands. Rocky areas were found to be inter-connected with gullies, which were filled with shelly, gravelly coarse sand and occasional cobbles and boulders. Within these gullies, mussel shell hash was observed.
- 4. No live mussels were identified in the video tows during the current survey and therefore an assessment of their extent; distribution, spatial pattern and species composition was not possible. Mussel shell hash was identified on 30 still images from 8 of the 31 video tows. Other species of note observed during the survey included the pink sea-fan (*Eunicella verrucosa*).

## **Table of contents**

E	kecutive	Summary	3
Ta	able of c	contents	4
Li	st of tab	oles	6
Li	st of fig	ures	7
Li	st of pla	ites	8
1	Back	ground and Introduction	1
	1.1.	Lyme Bay and Torbay cSAC	1
	1.2.	Mytilus edulis Biogenic Reefs	3
	1.2.1	L Background	3
	1.2.2	When a mussel bed becomes a biogenic reef	3
	1.3.	Existing data	4
	1.4.	Links to Action Plan	7
2	Surv	ey Design and Methods	8
	2.1.	Planning: including site/station selection	8
	2.2.	Sampling methods (seabed imagery)	8
	2.3.	Data and sample processing/analysis methodologies	10
	2.4.	Data QA/QC	10
3	Resu	ılts and Data Analysis	11
	3.1.	Seabed imagery	11
	3.1.1	L. GT05	12
	3.1.2	2. GT10	13
	3.1.3	3. GT18	14
	3.1.4	1. GT30	15
	3.1.5	5. Mussel shell hash	16
	3.2.	Biotopes	18
	3.3.	Evidence of human activity	23
4	Disc	ussion and conclusions	25
	4.1.	Summary of broadscale habitats encountered	25
	4.2.	Data limitations	25
	4.3.	Evidence of mussel beds	25
	4.5.	Recommendations	26
	4.6.	Conclusions	26
Α	cknowle	edgements	27
R	eference	es	28
Α	ppendic	es	30

A.	Summary of Video Information	.30
В.	Summary of Stills Information	. 34
C.	Video species list	.66

## List of tables

Table 1. Examples stills of identified biotopes1	19	9
--	----	---

## **List of figures**

Figure 1. Location of the Lyme Bay and Torbay cSAC. Bathymetry is from the Defra Digital Elevation  Model (Astrium, 2011)2
Figure 2. Torbay area of the Lyme Bay and Torbay cSAC site map showing the extent of existing point data on the location of <i>Mytilus edulis</i> 6
Figure 3. Actual positions of video ground-truthing stations across the Torbay extent of the Lyme Bay and Torbay cSAC. Bathymetry is from the Defra Digital Elevation Model (Astrium, 2011)9
Figure 4. Video tow location map and associated example images of corresponding habitats at GT05 in the northern extent of Torbay in the Lyme Bay and Torbay cSAC. Plate 2. Example still image of moderate energy circalittoral rock at GT05. Plate 3. Example still image of subtidal coarse sediment at GT05. Plate 4. Example still image of subtidal coarse sediment at GT05
Figure 5. Video tow location map and associated example images of corresponding habitats at GT10 in the northern extent of Torbay in the Lyme Bay and Torbay cSAC. Plate 5. Example still image of moderate energy circalittoral rock at GT10. Plate 6. Example still image of subtidal coarse sediment at GT10. Plate 7. Example still of subtidal mixed sediment at GT1014
Figure 6. Video tow location map and associated example images of corresponding habitats at GT18 in the southern extent of Torbay in the Lyme Bay and Torbay cSAC. Plate 8. Example still image of moderate energy circalittoral rock at GT18. Plate 9. Example still image of moderate energy circalittoral rock at GT18. Plate 10. Example still image of subtidal coarse sediment at GT18. 15
Figure 7. Video tow location map and associated example images of corresponding habitats at GT30 in the southern extent of Torbay in the Lyme Bay and Torbay cSAC.Plate 11. Example still image of subtidal sand at GT30. Plate 12. Example still image of subtidal sand at GT30. Plate 13. Example still image of subtidal sand at GT30.
Figure 8 Location of still images containing mussel shell hash in the north and south extents of  Torbay in the Lyme Bay and Torbay cSAC18
Figure 9. Biotope classification of stills along video tows in the northern extent of the Torbay region of Lyme Bay and Torbay cSAC21
Figure 10. Biotope classification of still images along video tows in the southern extent of the Torbay region of Lyme Bay and Torbay cSAC22
Figure 11. Location map of evidence of human activity a) car tyre and rubber glove, b) car tyre, c) wire /warp and d) abandoned fishing pot23

## **List of plates**

Plate 1. Example still image of <i>Eunicella verrucosa</i> observed at station G22 on a vertical rock face.	. 12
Plate 2. Example still image of moderate energy circalittoral rock at GT05	. 13
Plate 3. Example still image of subtidal coarse sedeiment at GT05.	. 13
Plate 4. Example still image of subtidal coarse sediment at GT05	. 13
Plate 5. Example still image of moderate energy circalittoral rock at GT10.	. 14
Plate 6. Example still image of subtidal coarse sediment at GT10.	. 14
Plate 7. Example still of subtidal mixed sediment at GT10	. 14
Plate 8. Example still image of moderate energy circalittoral rock at GT18	. 15
Plate 9. Example still image of moderate energy circalittoral rock at GT18	. 15
Plate 10. Example still image of subtidal coarse sediment at GT18.	. 15
Plate 11. Example still image of subtidal sand at GT30.	. 16
Plate 12. Example still image of subtidal sand at GT30.	.16
Plate 13. Example still image of subtidal sand at GT30.	. 16
Plate 14. Example of still photographs of mussel hash found in Torbay in the Lyme Bay and Torbay cSAC	
Plate 15 Evidence of human activity a) car tyre and rubber glove, b) car tyre, c) wire /warp and d)	. 24

## 1 Background and Introduction

Lyme Bay and Torbay was designated as an Inshore Special Area of Conservation (SAC) through the Offshore Marine Conservation (Natural Habitats) Regulations 2007. Natural England (NE), in partnership with Cefas and the Devon and Severn Inshore Fisheries Conservation Authority (IFCA), conducted a field survey to investigate the presence and extent of Annex I biogenic reef specifically within the Torbay area of the Lyme Bay and Torbay cSAC. The survey was designed to acquire sufficient groundtruth (seabed imagery) data to provide a robust characterisation of any Annex I Mussel (*Mytilus edulis*) biogenic reef habitat found within the site.

#### 1.1. Lyme Bay and Torbay cSAC

The Lyme Bay and Torbay cSAC site is located off the south coast of England adjacent to the counties of Dorset and Devon (Figure 1.). It is comprised of two main areas which support biological communities' representative of Annex I reef and sea cave habitat.

Areas of Annex I reef are described (from east to west) as Lyme Bay Reefs; and Mackerel Cove to Dartmouth Reefs (Natural England, 2010). In the Lyme Bay Reef areas, outcropping bedrock and pebbles, cobbles and boulders are found to extend over a large area. Unlike other sites within the Lyme Bay and Torbay site, they occur as outcropping bedrock slightly offshore rather than extending directly from the coast. The reefs in the Mackerel Cove to Dartmouth area exhibit great geological variety ranging from occasional granite outcrop to steeply inclined bedrock rising vertically with deep gullies that support rich species assemblages (Natural England, 2010).

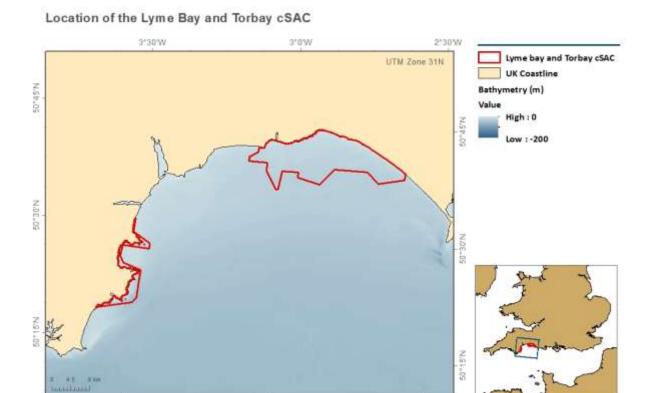


Figure 1. Location of the Lyme Bay and Torbay cSAC. Bathymetry is from the Defra Digital Elevation Model (Astrium, 2011).

Within Torbay, the reefs are discrete and primarily associated with the many headlands and coves. They are diverse in composition with limestone outcrops recorded in the southern half of the bay and sandstone in the upper half of the bay (Natural England, 2010). Many of the reefs support rich species assemblages with piddocks adding to the habitat complexity in the limestone outcrops and vertical faces and deep fissures in the sandstone provide a diverse range of habitats in the northern reefs. The reefs also support *Mytilus edulis* beds and honeycomb worm (*Sabellaria alveolata*) reefs, although there is limited information relating to their extent and biological status (Natural England, 2010), however, the majority of the Sabellaria reef is found intertidally. In the northern headland of Torbay, Hope's Nose reef is a large area of limestone stepped reef which supports an abundance of sessile species such as algae, anthozoa and hydroids. Off the Ore Stone, a mat of *Mytilus edulis* and carpet anemones are reported to dominate the seabed and to support the locally rare sea slug, *Okenia elegans*. Annex I bedrock reef was found to be concentrated in the southern part of the bay, between Berry Head and Dartmouth, where they often appeared to be sand scoured, with an abundance of *Mytilus edulis* and *Asterias rubens* (Ross, 2011).

© Crawn Copyright 2014

#### 1.2. Mytilus edulis Biogenic Reefs

#### 1.2.1 Background

Mytilus edulis is a gregarious species of mussel with a widespread distribution throughout Europe, from the high intertidal to the shallow subtidal, and is particularly important, both as a fishery, and as a source of food for benthic predators and birds (Holt et al., 1998;Hendrick et al., 2011; Fariñas-Franco et al., 2013). Mussels act as a keystone species by increasing habitat complexity, stabilising the seabed and providing a wide range of ecosystem functions, including: the creation of feeding habitats for mobile species; provision of nesting grounds and refugia from predation; benthic-pelagic coupling; and bioremediation (Coen et al., 2007; Elsässer et al., 2013). They attach to hard substrates using a protein fibre (byssus thread) which is secreted by the mussel. In soft sediment individuals tend to be semi-infaunal, projecting out from the sediment surface.

Mytilus edulis are broadcast spawners (i.e. they release eggs and sperm into the water column) and can reproduce in their first year with populations' generally spawning throughout the year, peaking in the spring (Seed, 1969). Larval growth typically takes 2 to 4 weeks, although this can take as long as 6 months, depending on temperature, food supply, substrate availability and local hydrodynamic conditions (Hendrick et al., 2011). High annual recruitment is possible, allowing juvenile beds to develop rapidly, though juvenile survival rate can be very variable year on year (Hendrick et al., 2011).

#### 1.2.2 When a mussel bed becomes a biogenic reef

In high densities, mussels form beds with multiple layers of individuals bound together by byssus threads. Recruitment of new individuals and mortality of the foundation layer can lead to the accumulation of sediment, faeces and pseudo faeces reaching as much as tens of centimetres thick (Hendrick et al., 2011), this is known as mussel mud. When the biomass of mussels is high, mounds of cohesive mussel mud may form, yet, when mussel stocks are low, the mounds may barely be detectable. The cohesive properties of the mussel mud means that once consolidated, it may remain for a number of years after the mussel bed itself has largely disappeared (Holt *et al.*, 1998).

A recent report by the Joint Nature Conservation Committee (JNCC) highlighted that those mussel aggregations that are found on species-poor, soft or mixed subtidal sediments, therefore increasing the structural complexity of the seafloor, should be defined as biogenic reefs. Under these conditions, mussels perform a similar functional role to those found on hard substratum, acting as positive biodiversity facilitators even at low densities (Holt et al., 1998; Fariñas-Franco et al., 2013). *M. edulis* can be highly productive systems compared to the surrounding, species-poor, non-mussel habitats. Conversely, mussel beds found on rocky substratum may be functionally similar to mussel

beds on soft or mixed substratum that qualify as reefs, however, these are not regarded as biogenic reefs as the effect of the mussels on community structure and composition is indistinguishable from that of the underlying rock habitat (Holt *et al.*, 1998).

Mytilus edulis differs fundamentally from other biogenic reef forming species, such as Sabellaria, as it supports a relatively important UK fishery. Intertidal beds are harvested to supply markets in the UK and continental Europe, while subtidal beds are dredged to supply seed for the mussel aquaculture industry (Fariñas-Franco et al., 2013).

#### 1.2.3 Long term stability

Mytilus edulis beds which qualify as biogenic reefs are not particularly elevated from the surrounding habitat and are usually much less than 50 cm deep (Holt et al., 1998). They tend to be fragmented in nature and controlled by factors such as: larval supply; environmental conditions (exposure, storms etc); predation and human impacts (Fariñas-Franco et al., 2013). Mytilus edulis has been shown, using mesocosm experiments, to tolerate short term and repeated burial, although mortality increases in finer sediments (Last et al., 2011). Their position and their presence may vary naturally between thin, patchy beds and well developed reefs, with a tendency to be relatively transient and ephemeral in nature (Fariñas-Franco et al., 2013).

#### 1.3. Existing data

Natural England provided both historic and recent sampling data to Cefas to assist in the planning of the assessment of biogenic reef in Torbay. Data sources provided by Natural England and existing records of *Mytilus edulis* included: Marine Recorder snapshot (various sources, August 2013); University of Plymouth's South Devon Reef Video Baseline Surveys for the Prawle Point to Plymouth Sound & Eddystone cSAC and Surrounding Areas (Ross, 2011) commissioned by Natural England; University of Plymouth's Condition Assessment of the Lyme Bay and Torbay Annex 1 reef habitats commissioned by Natural England and the Devon and Severn IFCA's unprocessed mussel specific video tows in Torbay.

Thirty nine records of *Mytilus edulis* were identified from Marine Recorder under four different biotope descriptions; *Fucus serratus* and large *Mytilus edulis* on variable salinity lower eulittoral rock (LR.LLR.FVS.FserVS) (3 records), *Mytilus edulis* beds on reduced salinity infralittoral rock (IR.LIR.IFaVS.MytRS) (2 records), *Mytilus edulis* beds with hydroids and ascidians on tide-swept exposed to moderately wave-exposed circalittoral rock (CR.MCR.CMus.CMyt) (27 records) and *Mytilus edulis* beds on sublittoral sediment (SS.SBR.SMus.MytSS) (7 records) and are displayed in Figure 2. Some unprocessed video tow data was made available for survey planning by Devon and Severn IFCA and is presented in Figure 2 along with local knowledge on the potential location of

Mytilus edulis from both Natural England and the Devon and Severn IFCA. These data and information were utilised to plan ground-truthing stations across the Torbay extent of the Lyme Bay and Torbay cSAC.

#### Existing point data for Mytilus edulis

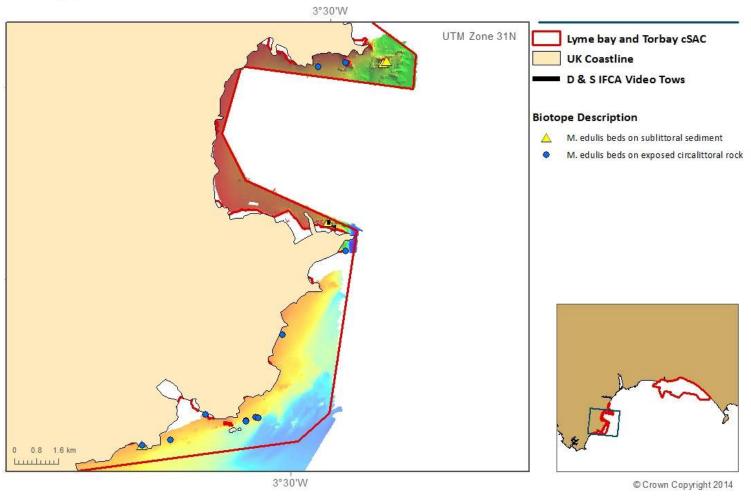


Figure 2. Torbay area of the Lyme Bay and Torbay cSAC site map showing the extent of existing point data on the location of Mytilus edulis

#### 1.4. Links to Action Plan

This report describes the survey findings and, together with the cruise report submitted previously (Murray & Whomersley, 2013), provides the necessary information required to discuss the *Mytilus edulis* biogenic reef feature of the Torbay area of the cSAC.

The Plan of Action document, drafted by all parties, agreed a number of Work Packages to ensure the attainment of the project's objectives; these included:

- Confirm presence and (where possible) extent of the Mytilus edulis biogenic reef feature;
- Gather information to help inform biotope composition, distribution, spatial pattern and species composition of the *Mytilus edulis* biogenic reef feature;
- Collect data to explore the population structure of the Mytilus edulis biogenic reefs

## 2 Survey Design and Methods

#### 2.1. Planning: including site/station selection

The characterisation of the Torbay biogenic reef was a cross-agency venture involving Natural England (responsible for the identification of Marine Protected Areas (MPAs) in UK inshore waters), Cefas (who provided operational equipment and scientific expertise) and the Devon and Severn IFCA (who provided the research platform and local knowledge and expertise). The project partners (NE and Cefas) were represented at all planning meetings and were involved in determining the overall direction of the survey plan. A Geographic Information System (GIS) project was created which contained all available and relevant data layers. Using this GIS project, ground-truthing station positions were planned based taking account of pre-existing acoustic survey data and the typical operational capabilities of the survey vessel.

#### 2.2. Sampling methods (seabed imagery)

Thirty one video stations and 461 corresponding still images were acquired across the Torbay area of the Lyme Bay and Torbay cSAC during the survey (Figure 3). Underwater video footage and still photographs were collected using a drop-frame fitted with a Kongsberg OE14-208 camera (video and stills) system along with two Cefas high intensity LED strip-lights and a four-spot laser-scaling device to provide a reference scale in the video image. A live feed from the camera to the deck of the survey vessel enabled direct observation of the seabed during sample acquisition. The MESH 'Recommended operating guidelines for underwater video and photographic imaging techniques' were followed during video sample acquisition (Coggan et al., 2007). Photographs were taken at approximately one minute intervals and additional photographs were taken opportunistically in order to capture images of particular features of interest. All video footage and still photographs were digitised and delivered to Natural England in February 2014.

<sup>&</sup>lt;sup>1</sup> Reference URL: http://www.searchmesh.net/PDF/GMHM3 Video ROG.pdf

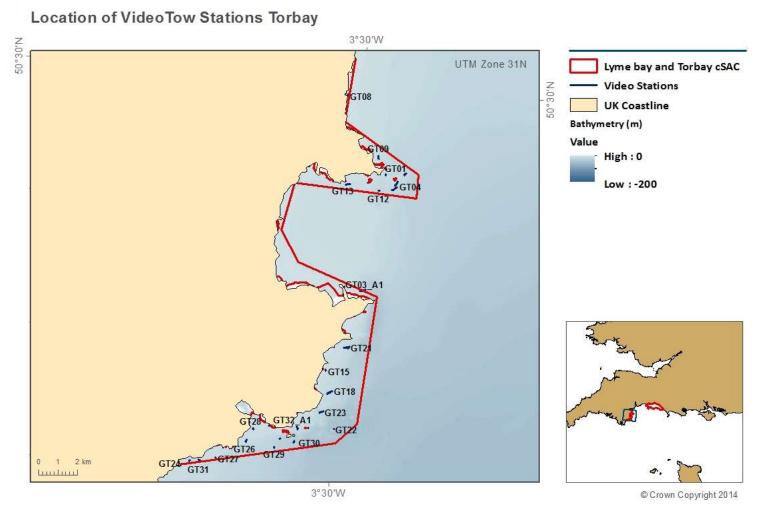


Figure 3. Actual positions of video ground-truthing stations across the Torbay extent of the Lyme Bay and Torbay cSAC. Bathymetry is from the Defra Digital Elevation Model (Astrium, 2011).

#### 2.3. Data and sample processing/analysis methodologies

The footage acquired from each video tow was analysed to detect and record any changes in habitat type across the entire transect, and to describe in more detail the physical features and the epifaunal communities associated with the habitat types present. Physical features recorded included the proportion of different substrate types, inclination, texture, stability, presence of formations and evidence of bioturbation. Epifauna were quantified according to the Marine Nature Conservation Review (MNCR) SACFOR abundance scale (S = Superabundant, A = Abundant, C = Common, F = Frequent, O = Occasional and R = Rare). All photographic stills were analysed from each of the different biotopes identified in the video transect. Epifauna were also recorded from the still images using the SACFOR scale after identification to the lowest possible taxonomic level. All information extracted from the video and stills samples was recorded on the MNCR habitat recording forms before being entered into the Marine Recorder database. Data extracted from video and stills are, at best, semi-quantitative and, as such, do not lend themselves to classical algebraic functions and statistical treatment; therefore, no quantitative analysis of the video data has been made.

#### 2.4. Data QA/QC

All activities in the field were performed according to the recommendations in the following documents:

- Biological Monitoring: General Guidelines for Quality Assurance document<sup>2</sup> (ICES, 2004)
- Quality Assurance in Marine Biological Monitoring<sup>3</sup> (Addison, 2010)
- Recommended operating guidelines for underwater video and photographic imaging techniques<sup>1</sup>

<sup>&</sup>lt;sup>2</sup> Reference URL: http://www.searchmesh.net/PDF/GMHM3\_Video\_ROG.pdf

<sup>&</sup>lt;sup>3</sup> Reference URL: http://www.nmbagcs.org/ga-standards/ga-in-marine-biological-monitoring.aspx

## 3 Results and Data Analysis

#### 3.1. Seabed imagery

The 31 video stations and 461 corresponding stills collected across the Torbay area of the Lyme Bay and Torbay cSAC were analysed for any changes in habitat type across the entire transect and to describe the physical features and the epifaunal communities associated with the habitat types present. Three of the video stations were split into separate segments, representing distinctly different broadscale habitats (BSHs). Four BSHs were identified from the video and stills data acquired across the area and these included:

- A4.2. Moderate Energy Circalittoral Rock
- A5.1. Subtidal Coarse Sediment
- A5.2. Subtidal Sand
- A5.4. Subtidal Mixed

The Torbay extent of the Lyme Bay and Torbay cSAC was generally characterised by fine to muddy sand with the presence of some shell, as well as sedimentary mosaics comprising various densities of gravel, cobbles, pebbles, boulders and bedrock. In many cases, multiple biotopes were recorded in one video tow and, in some cases, within a still image. Areas of subtidal sand which were composed of fine to muddy sand were characterised by species which included: Pagurus bernhardus (the common hermit crab); Asterias rubens (common starfish); Calliactis parasitica (sea anemone); tube worms (Spirobranchus); brittle stars (Ophiura) and hydroid and bryozoan turfs. Bedrock, which was typically covered with a layer of silt, was frequently encrusted with Porifera, anthozoan, echinoderm and crustacean communities, which were largely dominated by Alcyionium digitatum (dead man's finger), Antedon bifida (featherstars), Sagartia elegans, and Urticina felina (sea anemones) and crustaceans, Cancer pagurus (edible crab), Necora puber (velvet swimming crab) and Maja brachydactyla (common spider crab). At one station (GT22), nine Eunicella verrucosa (pink sea-fan) were observed on vertical rock (Plate 1). Example transects demonstrating each of the broadscale habitats identified (A4.2. Moderate Energy Circalittoral Rock, A5.1. Subtidal Coarse Sediment, A5.2. Subtidal Sand and A5.4. Subtidal Mixed Sediment) are presented below, with associated images taken along the length of the transect. Full details of each video tow, the associated stills and species list can be found in the appendices.



Plate 1. Example still image of Eunicella verrucosa observed at station G22 on a vertical rock face.

#### 3.1.1. GT05

Transect GT05 in the northern extent of the Torbay site near to Hope's Nose ran in a south-westerly direction across two BSHs; A4.2. 'Moderate Energy Circalittoral Rock' and A5.1. 'Subtidal Coarse Sediment'. *Alcyionium digitatum, Sagartia elegans, Nemetesia anteninna,* Porifera and *Callionymus lyra* (the common Dragonet) were associated with areas of exposed bedrock, however, much of the bedrock was covered by, or surrounded by, a mosaic of sand, mud, empty shell, cobbles, gravel and pebble. *Asterias rubens*, Spirobranchus sp, *Crepidula fornicata* and Porifera were all observed in these habitats (Figure 4).

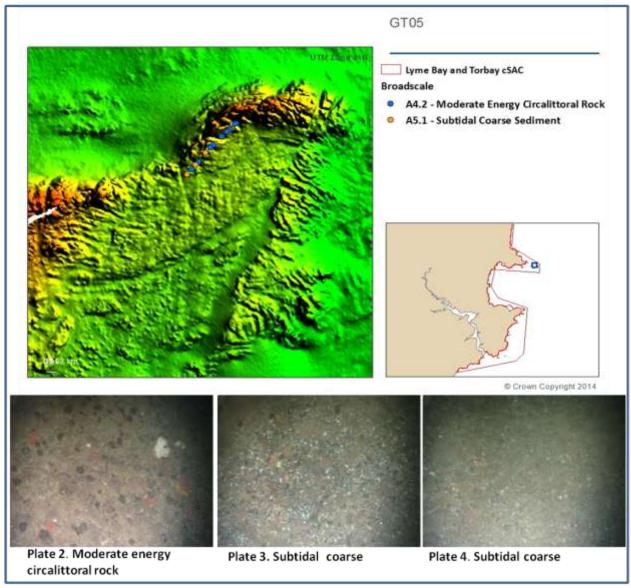


Figure 4. Video tow location map and associated example images of corresponding habitats at GT05 in the northern extent of Torbay in the Lyme Bay and Torbay cSAC. Plate 2. Example still image of moderate energy circalittoral rock at GT05. Plate 3. Example still image of subtidal coarse sedeiment at GT05. Plate 4. Example still image of subtidal coarse sediment at GT05.

#### 3.1.2. GT10

Transect GT10 in the northern extent of the Torbay site, to the south west of GT05, ran in a south-westerly direction across three BSHs; A4.2. 'Moderate Energy Circalittoral Rock' and a mosaic of 'A5.1. 'Subtidal Coarse Sediment' and 'A5.4. Subtidal Mixed Sediment'. Silted bedrock was found within areas of coarse sediment, which consisted of a mixture of sand, mud, shell, cobbles and pebbles (Figure 5. Plate 5). *Alcyonium digitatum, Antedon bifida, Necora puber, Nemertesia anteninna* and a hydroid/bryozoan turf were found associated with bedrock and *Cancer pagurus, Carcinus maenas, Asterias rubens, Cellaria* sp. and Spirobranchus sp. were observed on a mixture of muddy sand and empty shell.

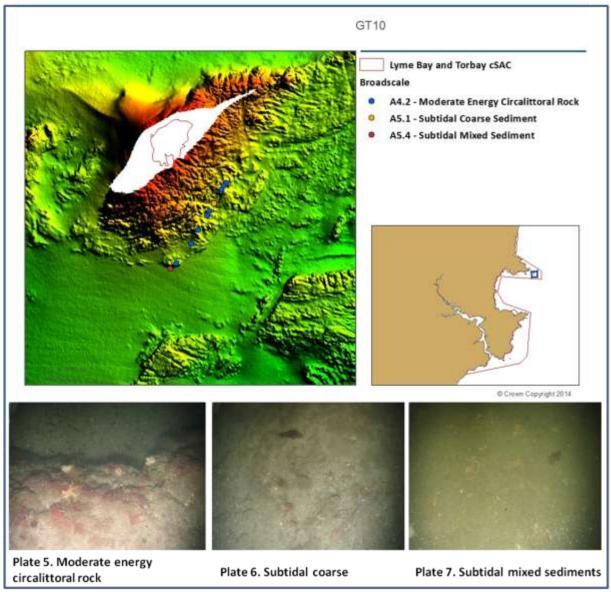


Figure 5. Video tow location map and associated example images of corresponding habitats at GT10 in the northern extent of Torbay in the Lyme Bay and Torbay cSAC. Plate 5. Example still image of moderate energy circalittoral rock at GT10. Plate 6. Example still image of subtidal coarse sediment at GT10. Plate 7. Example still of subtidal mixed sediment at GT10.

#### 3.1.3. GT18

Transect GT18 in the southern extent of the Torbay site ran in a south-westerly direction across three BSHs; A4.2. 'Moderate Energy Circalittoral Rock' and a mosaic of 'A5.1. 'Subtidal Coarse Sediment' and 'A5.4. Subtidal Mixed Sediment'. Areas of bedrock were heavily silted or covered by a layer of muddy sand and empty shells, and were often separated by small areas or gullies of coarse sand, gravel and empty shells (Figure 6, Plates 9 and 10). Communities associated with areas of bedrock comprised of; *Alcyonium digitatum*, *Sagartia elegans*, *Necora puber Caryophyllia smithii* and Scyliorhinidae (Figure 6. Plates 8 and 9). *Sagartia elegans*, *Cancer pagurus*, *Asterias rubens* and Didemnidae, Porifera, Nemertesia and Spirobranchus were found associated with the coarser and mixed habitats found in between areas of exposed bedrock (Figure 6. Plate 10).

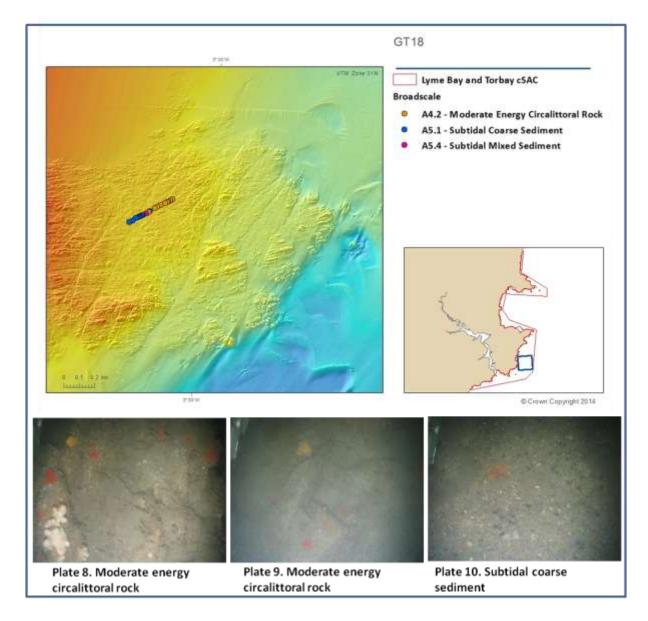


Figure 6. Video tow location map and associated example images of corresponding habitats at GT18 in the southern extent of Torbay in the Lyme Bay and Torbay cSAC. Plate 8. Example still image of moderate energy circalittoral rock at GT18. Plate 9. Example still image of moderate energy circalittoral rock at GT18. Plate 10. Example still image of subtidal coarse sediment at GT18.

#### 3.1.4. GT30

Transect GT30 in the southern extent of the Torbay site ran in a southerly direction and comprised of a single BSH, 'A5.2. Subtidal Sand". This homogenous tow of rippled, fine slightly muddy sand was sparse in fauna (Figure 7), with only Spirobranchus and Ophiura present in some of the still images.

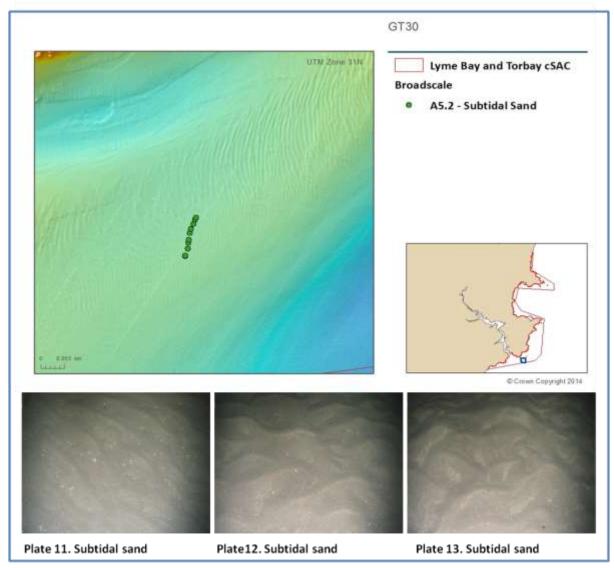


Figure 7. Video tow location map and associated example images of corresponding habitats at GT30 in the southern extent of Torbay in the Lyme Bay and Torbay cSAC.Plate 11. Example still image of subtidal sand at GT30. Plate 12. Example still image of subtidal sand at GT30. Plate 13. Example still image of subtidal sand at GT30.

#### 3.1.5. Mussel shell hash

No live mussels were identified in the video tows during the current survey and therefore an assessment of their extent; distribution, spatial pattern and species composition was not possible. Mussel shell hash (examples shown in Plate 14) was identified on 30 still images from 8 of the video tows within Torbay; GT26, GT05, GT11, GT16, GT18, GT21, GT32\_A1 and GT32\_A2. Twenty nine of the 30 images were associated with 'A5.1. Sublittoral coarse sediment' (unstable cobbles and pebbles, gravels and coarse sands) and one image was classified as 'A5.4. Sublittoral mixed sediment' (Figure 9).



Plate 14. Example of still photographs of mussel hash found in Torbay in the Lyme Bay and Torbay cSAC

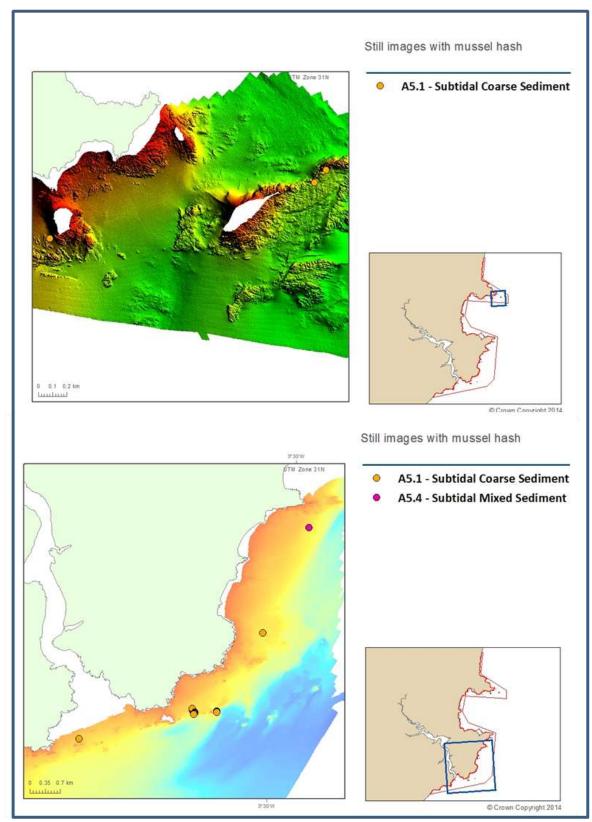


Figure 8 Location of still images containing mussel shell hash in the north and south extents of Torbay in the Lyme Bay and Torbay cSAC

#### 3.2. Biotopes

Five biotopes within the classifications A.4. 'Circalittoral rock and other hard substrata' and A.5. 'Sublittoral sediment' were identified from ground- truth video tows. Three of these biotopes were

within the A.5. 'Sublittoral sediment' hierarchy and two within A.4. 'Circalittoral rock and other hard substrata'. Examples of these biotopes can be found in Table 1 and their location within the Torbay site is mapped in Figures 9 (Northern extent of the site) and 10 (Southern Extent of the site).

Table 1. Examples stills of identified biotopes

Biotope and stations	EUNIS Code	
Eunicella verrucosa and Pentapora foliacea on wave- exposed circalittoral rock MCR.XFa.ErSEun GT22	A4.1311	
Echinoderms and crustose communities CR.MCR.EcCr	A4.21	
GT05, GT31, GT26, GT32_A1, GT32_A2, GT16, GT22, GT18, GT21, GT11, GT04, GT12, GT15, GT21B, GT03_A1, GT03_A2		
Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands) SS.SCS	A5.1	
GT05, GT24, GT31, GT25, GT27, GT26, GT35, GT32_A1, GT32_A2, GT16, GT22, GT23, GT18, GT01		

Biotope and stations	EUNIS Code	
Sublittoral sands and muddy sands SS.SSa GT08, GT31, GT28, GT33, GT29, GT30, GT13, GT04, GT12, GT03_A1, GT03_A2, GT38	A5.2	
Sublittoral mixed sediment SS.SMx GT10, GT24, GT31, GT25, GT27, GT23, GT18, GT21, GT04, GT21B, GT03_A1, GT03_A2	A5.4	

#### EUNIS biotope classification of video tows

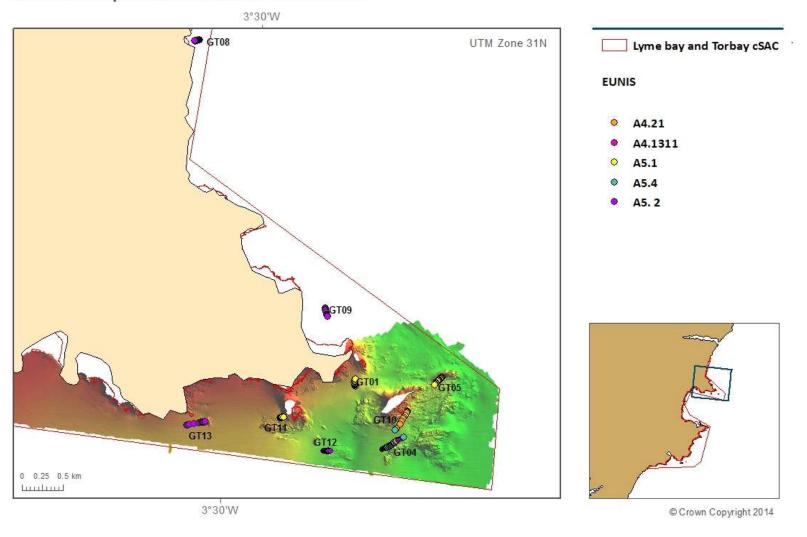


Figure 9. Biotope classification of stills along video tows in the northern extent of the Torbay region of Lyme Bay and Torbay cSAC

#### **EUNIS** biotope classification of video tows

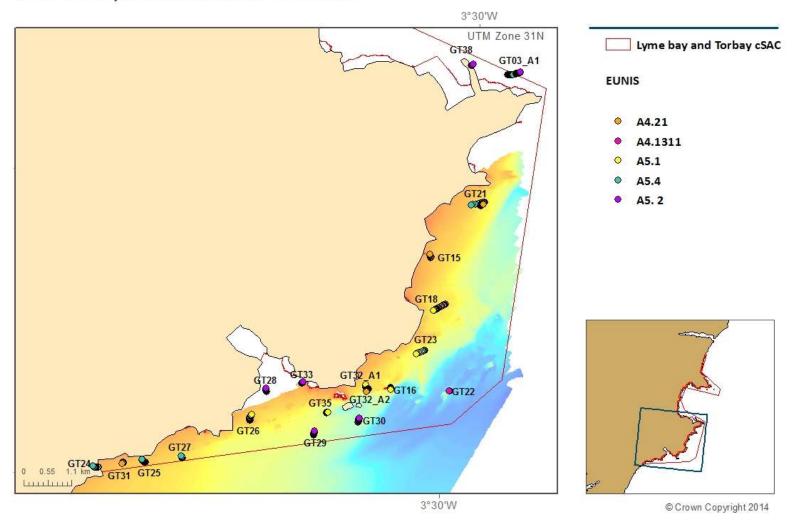


Figure 10. Biotope classification of still images along video tows in the southern extent of the Torbay region of Lyme Bay and Torbay cSAC

#### 3.3. Evidence of human activity

A number of planned stations were either abandoned or repositioned due to the presence of static gear in the Torbay area during the survey. Most of the affected tows were located in the southern extent of the site (GT22, GT19, GT03 and GT34), with only one located to the north (GT11). In addition, evidence of human activity was observed at four tow locations across the Torbay site (Figure 11) and included two car tyres (Plate 15. a) and b)), a rubber glove and some wire/warp and an abandoned fishing pot was also observed during the video transects (Plate 15).

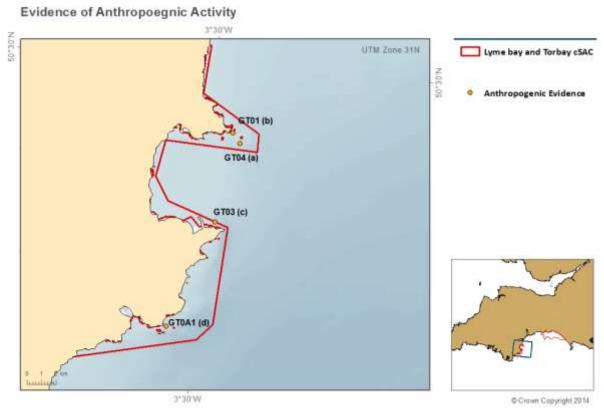


Figure 11. Location map of evidence of human activity a) car tyre and rubber glove, b) car tyre, c) wire /warp and d) abandoned fishing pot.

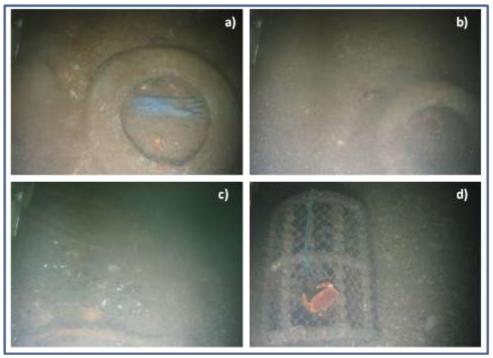


Plate 15 Evidence of human activity a) car tyre and rubber glove, b) car tyre, c) wire /warp and d) abandoned fishing pot.

## 4 Discussion and conclusions

#### 4.1. Summary of broadscale habitats encountered

A range of habitats were observed during video tows carried out in the Torbay extent of the Lyme Bay and Torbay cSAC. These were classified within the hierarchies 'A.5 Sublittoral sediment' and; A.4 Circalittoral rock and other hard substrata'. The observed habitats ranged from rippled sand to mosaics of boulders and rock on shelly, gravelly coarse sands. Rocky areas were found to be interconnected with gullies which were filled with shelly, gravelly coarse sand and occasional cobbles and boulders. Within these gullies, mussel shell hash was observed in sublittoral coarse sediment biotopes.

#### 4.2. Data limitations

A number of limitations were identified in terms of robustly assessing the video and still image data. Poor visibility further hindered the already subjective nature of identifying sedimentary habitat types from images alone, and also limited species identification. While the majority of the video and stills data from the drop camera surveys were of moderate to good quality, poor visibility did affect the assessment of some of video footage and still images (19 still images were of inadequate quality for analysis). This ultimately limited the final biotope classification at some stations.

The use of grab samples for PSA and infaunal analysis was not part of the survey plan to define the presence and extent of mussel biogenic reef. This precluded the use of any univariate and multivariate analyses, which could have been used to explore patterns in infaunal benthic community structure and assemblage composition.

#### 4.3. Evidence of mussel beds

Although no live mussels were identified in video footage taken across the Torbay site, mussel shell hash was identified in 30 still photographs of sublittoral coarse sediments. The source location of this shell hash can only be hypothesised. It is possible that it washed in from outside of the Torbay area and settled within the inter-connecting gullies between rock features. Alternatively, the shell hash could be the remnants of a previously intact mussel bed which could have remained in the area due to the consolidated nature of the mussel mud and accumulated sediment around the dead shell. Mussel beds (as previously mentioned) can be relatively transient and ephemeral in nature and recovery from disturbance may take up to five years (Fariñas-Franco et al., 2013) so it is possible that the shell hash observed is evidence of a historic mussel bed.

#### 4.5. Recommendations

In order to establish if there are ephemeral mussel beds present in the Torbay extent of the Lyme Bay and Torbay cSAC, it would be advantageous to establish a temporal sampling regime in key areas. An annual monitoring programme would identify the presence and extent of ephemeral beds, while a tri-annual programme would enable the assessment of established mussel beds, their growth rates and also recovery after disturbance. Key areas should be selected based on the presence of mussel shell hash from ground truth data collected during the survey reported here, as well as previously collected point source data reporting biotopes containing *Mytilus edulis*. These should be focused in the northern extent of the site around the Ore Stone, in the centre of the site around Hope's Nose and in rocky areas in the southern extent of the site (Figure 8).

The sampling period should consider the spring spawning peak observed in *Mytilus edulis*. Mussel spat settle out of the water column up to 6 weeks after spawning and, with high annual recruitment possible, juvenile beds can develop regularly and rapidly. A sampling period in early summer (May or June) would allow the detection of mussel seedbeds, if there was a high juvenile settlement rate in that sampling year.

A targeted Hamon grab sampling campaign, in addition to video tows, would be useful for identifying the presence of mussel spat which may be concealed within existing mussel mud. It would also allow the biological and ecological significance of existing mussel mud and remnants of a possible historic mussel bed to be quantified and compared to samples taken from areas of the same broadscale habitat but without the mussel mud.

#### 4.6. Conclusions

The video survey undertaken in 2013 provides new data from the Torbay extent of the Lyme Bay and Torbay cSAC on the BSHs found at the site and the location of mussel shell hash which could be indicative of a previously intact mussel bed. An on-going survey plan, employing both video and grab sample ground-truthing techniques, would be required to accurately assess the site for the presence of *Mytilus edulis* biogenic reef, which is transient and ephemeral in nature, and explore the ecological functional role of mussel mud.

## **Acknowledgements**

We thank the Captain and crew of the *Drumbeat of Devon* who contributed to the production of this report by providing the survey platform and much useful help and advice during the progress of the survey. We also thank Chris Jenkins (Cefas) for help and advice during the survey planning phase and for the production of maps for inclusion in this report.

# References

Addison, Environment Agency/Joint Nature Conservation Committee (2010). Quality

Assurance in Marine Biological Monitoring. A report prepared for the Healthy and Biologically Diverse Seas Evidence Group and the National Marine Biological Analytical Quality Control scheme. Pp 8.

Astrium (2011). Creation of a high resolution Digital Elevation Model (DEM) of the British Isles continental shelf: Final Report. Prepared for Defra, Contract Reference: 13820. 26pp

Coggan, R., Mitchell, A., White, J., & Golding, N. (2007). MESH 'Recommended Operating Guidelines (ROG) for underwater video and photographic imaging techniques'.

Coen, L.D., Brumbaugh, R.D., Bushek, D., Grizzle, R., Luckenbach, M., Posey, M.H., Powers, S.P.,

Tolley, S.G., (2007). Ecosystem services related to oyster restoration. Marine Ecology Progress Series. 341, 303–307.

Elsässer, B., Fariñas-Franco, J.M., Wilson, C.D., Kregting, L. & Roberts, D. (2013). Identifying optimal sites for natural recovery and restoration of impacted biogenic habitats in a special area of conservation using hydrodynamic and habitat suitability modelling. Journal of Sea Research. 77:11–21.

Fariñas-Franco, J.M., Pearce, B., Porter, J., Harries, D., Mair, J.M. & Sanderson, W.G. (2013).

Development and validation of indicators of Good Environmental Status for Biogenic Reefs formed by *Modiolus modiolus, Mytilus edulis* and *Sabellaria spinulosa* under the Marine Strategy Framework Directive. 295 Pages.

Hendrick, V. J., Foster-Smith, R. L. & Davies, A. J. (2011). Biogenic Reefs and the Marine Aggregate Industry. Marine ALSF Science Monograph Series No. 3. MEPF 10/P149. (Edited by R. C. Newell & J. Measures). 60pp. ISBN: 978 0 907545 46 0.

Holt, T. J., Rees, E. I., Hawkins, S. J., & Seed, R. (1998). Biogenic Reefs (Volume IX): An overview of dynamic and sensitivity characteristics for conservation management of marine SACs. Scottish Association for Marine Science (UK Marine SACs Project). 170 Pages.

ICES. (2004). Biological Monitoring: General Guidelines for Quality Assurance document<sup>4</sup> ICES
Techniques in Marine Environmental Sciences. No. 32. Pp. 52.

Assessment of the Torbay Biogenic Reef

Last, K., Hendrick, V.J., Beveridge, C.M. & Davies, A.J. (2011). Measuring the effects of suspended particulate matter and smothering on the behaviour, growth and survival of key species found in areas associated with aggregate dredging. MEPF 08/P76: Final Report

Murray, J. & Whomersley, P. (2013) Assessment of baseline conditions of Torbay Biogenic Reef: cruise report. 42 Pages.

Natural England. (2010). Evidence Base for designation of Lyme Bay and Torbay Special Area of Conservation. 83 Pages.

Ross, R. (2011). South Devon Reef Video Baseline Surveys for the Prawle point to Plymouth Sound & Eddystone cSAC and Surrounding Areas. University of Plymouth Marine Institute.

Seed, R. (1969). The ecology of *Mytilus edulis* L. (Lamellibranchiata) on exposed rocky shores. *Oecologia*. Vol. 3: 3-4. pp 277-316.

# **Appendices**

# A. Summary of Video Information

Date	Video Sample Ref	Brief Habitat Description	Start Time (hh:mm:ss)	End Time (hh:mm:ss)	Duration	Start	End	5.Biotope (EUNIScode)	Classification (MNCR descriptor)	BiotopeKey (MNCRcode)
25/09/2013	GT08_S1	Slightly muddy sand with some occasional empty shells. Paguridae, Asterias rubens and hydroid/bryozoan turf present	14:13:11	14:23:57	00:10:46	50.49510, - 3.51033	50.49490, -3.51122	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
25/09/2013	GT09_S1	Slightly muddy sand with some occasional empty shells. Paguridae, Maja brachdactlya and Asterias rubens observed	14:49:12	15:03:04	00:13:52	50.46757, - 3.48473	50.46588, -3.48413	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
25/09/2013	GT05_S1	Possible bedrock covered by, and surrounded by areas of, a mixture of sand, mud, empty shell, cobbles, gravel and pebbles. Also some areas of exposed bedrock. Asterias rubens, Alcyonium digitatum and Nemertesia anteninna	15:40:17	15:50:20	00:10:03	50.46035, - 3.46342	50.45935, -3.46463	A5.4 - Subtidal Mixed Sediment	Subtidal Mixed Sediment	SS.SMx
25/09/2013	GT10_S1	Silted bedrock within areas of coarse sediment consisting of sand, mud, shell, cobbles and pebbles. Alcyonium digitatum, Necora puber, Cancer pagurus and Asterias rubens observed	15:59:34	16:09:07	00:09:33	50.45622, - 3.46890	50.45402, -3.47073	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT24_S1	Mostly coarse sand and gravel with empty shells. Some fine sand and mud. Paguridae and Rhodophyta present.	06:38:03	06:48:02	00:09:59	50.31510, - 3.60977	50.31528, -3.61143	A5.4 - Subtidal Mixed Sediment	Subtidal Mixed Sediment	SS.SMx
26/09/2013	GT31_S1	A mixture of fine, muddy sand and coarse sand with some gravel. Asterias rubens present.	06:59:10	07:08:11	00:09:01	50.31642, - 3.60175	50.31623, -3.60225	A5.4 - Subtidal Mixed Sediment	Subtidal Mixed Sediment	SS.SMx
26/09/2013	GT25_S1	Mostly coarse sand and gravel with empty shells. Some fine sand and mud. Asterias rubens and Paguridae present.	07:22:57	07:33:01	00:10:04	50.31700, - 3.59477	50.31750, -3.59590	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT27_S1	A mixture of fine and coarse sand with some gravel and pebbles.  Asterias rubens, Ophiura and	08:11:57	08:17:59	00:06:02	50.31862, - 3.58308	50.31900, -3.58357	A5.4 - Subtidal Mixed Sediment	Subtidal Mixed Sediment	SS.SMx

Date	Video Sample Ref	Brief Habitat Description	Start Time (hh:mm:ss)	End Time (hh:mm:ss)	Duration	Start	End	5.Biotope (EUNIScode)	Classification (MNCR descriptor)	BiotopeKey (MNCRcode)
		Paguridae.	,	,				, ,		,
26/09/2013	GT26_S1	Mostly a mixture of fine and coarse sand with some gravel and pebbles. Some silted bedrock and large boulders at beginning of video. Asterias rubens, Phyllophora crsipa?, Cliona celata and Necora puber.	08:51:46	09:01:09	00:09:23	50.32753, - 3.56250	50.32872, -3.56215	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT28_S1	A mixture of fine sand and mud. No fauna visible. Anthropogenic tyre present.	09:26:20	09:32:04	00:05:44	50.33367, - 3.55803	50.33437, -3.55830	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT33_S1	A mixture of fine sand and mud. Actinopterygii and Fucus serratus present. Evidence of anthropogenic dredging.	09:44:03	09:50:45	00:06:42	50.33612, - 3.54695	50.33640, -3.54650	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT29_S1	A mixture of fine sand and mud.  Asterias rubens present.	10:17:23	10:23:59	00:06:36	50.32568, - 3.54170	50.32647, -3.54153	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT30_S1	A mixture of fine sand and mud. Paguridae and Asterias rubens.	10:43:53	10:52:00	00:08:07	50.32907, - 3.52778	50.32993, -3.52755	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT35_S1	A mixture of fine and coarse sand with some gravel and pebbles. Ulva	11:05:16	11:12:13	00:06:57	50.33047, - 3.53817	50.33053, -3.53770	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_S1	Mostly exposed bedrock with the occassional small patch of gravel and sand. Alcyonium digitatum, Cliona celata and Urticina felina.	11:30:42	11:33:59	00:03:17	50.33627, - 3.52590	50.33690, -3.52647	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_S2	Mostly coarse sand and gravel with empty shells. Asterias rubens, Urticina felina and Cancer pagurus present.	11:33:59	11:40:03	00:06:04	50.33627, - 3.52590	50.33690, -3.52647	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32A2_S 1	Mostly coarse sand and gravel with empty shells. Plus occasional areas of bedrock. Asterias rubens, Alcyonium digitatum and Metridium senile present.	12:31:12	12:42:59	00:11:47	50.33605, - 3.52542	50.33557, -3.52592	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT22_S1	Mixture of sand, mud, shell, cobbles and pebbles with areas	13:53:10	13:56:47	00:03:37	50.33713, - 3.49932	50.33713, -3.49958	A4.2 - Moderate	Echinoderms and crustose	CR.MCR.EcCr

Data	Video Sample	Drief Habitat Description	Start Time	End Time	Domatica	Chart	rd	5.Biotope	Classification	BiotopeKey
Date	Ref	of bedrock and boulders.  Eunicella verrucosa, Alcyonium digitatum and Asterias rubens.	(hh:mm:ss)	(hh:mm:ss)	Duration	Start	End	(EUNIScode)  Energy Circalittoral Rock	(MNCR descriptor) communities	(MNCRcode)
26/09/2013	GT22_S2	Mixture of sand, mud, shell, cobbles and pebbles with areas of bedrock and boulders.  Eunicella verrucosa, and Alcyonium digitatum.	13:53:10	13:56:47	00:03:37	50.33707, - 3.49977	50.33707, -3.49983	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT23A2_S 1	A mixture of fine and coarse sand with some gravel and pebbles.  Asterias rubens present.	15:00:04	15:06:55	00:06:51	50.34503, - 3.50837	50.34418, -3.51113	A5.4 - Subtidal Mixed Sediment	Subtidal Mixed Sediment	SS.SMx
26/09/2013	GT18_S1	Mostly heavily silted bedrock separated by small areas of coarse sand, gravel and empty shells. Alcyonium digitatum, Sagartia elegans, Necora puber and Scyliorhinidae.	15:32:46	15:43:43	00:10:57	50.35490, - 3.50315	50.35330, -3.50688	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT21A_S1	Slightly sandy and silted bedrock with areas of sand, shell, pebbles, cobbles and boulders. <i>Necora puber</i> present.	16:05:01	16:14:21	00:09:20	50.37653, - 3.49350	50.37575, -3.49757	A5.4 - Subtidal Mixed Sediment	Subtidal Mixed Sediment	SS.SMx
04/10/2013	GT13_S1	Almost the entire segment consists of sand with some empty shell, but a short part at the end of the video is slightly sandy bedrock. Asterias rubens and Cancer pagurus observed	08:46:41	08:55:54	00:09:13	50.45257, - 3.50675	50.45310, -3.50363	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT01A_S1	Mixture of mostly pebbles and gravel with some cobbles, sand and mud. Asterias rubens, Cancer pagarus and Alcyonium digitatum observed	09:10:45	09:21:04	00:10:19	50.45847, - 3.47828	50.45925, -3.47838	A5.4 - Subtidal Mixed Sediment	Subtidal Mixed Sediment	SS.SMx
04/10/2013	GT01B_S1	Mixture of mostly pebbles and gravel with some cobbles, sand and mud. Asterias rubens and Porifera present	09:29:00	09:35:56	00:06:56	50.45935, - 3.47630	50.45845, -3.47553	A5.4 - Subtidal Mixed Sediment	Subtidal Mixed Sediment	SS.SMx
04/10/2013	GT11_S1	Slightly sandy and silted bedrock with areas of sand, shell, pebbles, cobbles and boulders. Alcyonium digitatum, Nemertesia anteninna and Porifera observed	09:48:12	09:51:05	00:02:53	50.45423, - 3.49082	50.45437, -3.49020	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT04_S1	Mixture of muddy sand, empty	10:55:12	11:07:14	00:12:02	50.45180, -	50.45328,	A5.4 - Subtidal	Subtidal Mixed	SS.SMx

	Video									
	Sample		Start Time	End Time				5.Biotope	Classification	BiotopeKey
Date	Ref	Brief Habitat Description shell, cobbles and pebbles with	(hh:mm:ss)	(hh:mm:ss)	Duration	Start 3.47268	-3.46920	(EUNIScode) Mixed	(MNCR descriptor) Sediment	(MNCRcode)
		areas of bedrock. Asterias				3.47208	-3.46920	Sediment	Seament	
		rubens, Porifera and Metridium						Sediment		
		senile observed. Rubber glove								
		and tyre also observed.								
04/10/2013	GT12 S1	Sand with some empty shell.	11:16:45	11:22:56	00:06:11	50.45102, -	50.45105,	A5.2 - Subtidal	Subtidal sands and	SS.SSa
- , -,	_	Asterias rubens and				3.48278	-3.48200	Sand	muddy sands	
		hydroid/bryozoan turf observed							,	
	GT12_S2	Mixture of sand, shell and	11:22:56	11:26:16	00:03:20	50.45105, -	50.45110,	A5.1 - Subtidal	Sublittoral coarse	SS.SCS
		pebbles with an area of bedrock.				3.48200	-3.48158	Coarse	sediment (unstable	
		Cancer pagurus and Porifera						Sediment	cobbles and	
		observed.							pebbles, gravels	
									and coarse sands)	
04/10/2013	GT21A2_S	Slightly sandy and silted bedrock	13:24:51	13:34:17	00:09:26	50.37577, -	50.37608,	A5.4 - Subtidal	Subtidal Mixed	SS.SMx
	1	with areas of sand, shell, pebbles,				3.49468	-3.49372	Mixed	Sediment	
		cobbles and boulders. Necora						Sediment		
		puber, Maja brachydactylus,								
		Pleuronectes platessa? And								
04/10/2013	GT03A1 S	Antedon bifida.  Mixture of mostly sand, mud,	14:36:12	14:43:35	00:07:23	50.40310, -	50.40312,	A5.4 - Subtidal	Subtidal Mixed	SS.SMx
04/10/2013	1	pebbles and cobbles with some	14.30.12	14.43.33	00.07.23	3.48977	-3.48790	Mixed	Sediment	33.3IVIX
	1	areas of heavily silted bedrock.				3.40377	-3.46730	Sediment	Sediment	
		Necora puber, Rhodophyta and						Scament		
		Actinopterygii present								
04/10/2013	GT03A2_S	Mixture of sand, mud, shell,	14:49:57	15:00:34	00:10:37	50.40345, -	50.40387,	A5.4 - Subtidal	Subtidal Mixed	SS.SMx
	1	cobbles and pebbles with areas				3.48690	-3.48557	Mixed	Sediment	
		of bedrock and boulders.						Sediment		
		Possible planks of wood seen.								
		Necora puber, Porifera and								
		Asterias rubens present								
04/10/2013	GT38_S1	A mixture of fine sand and mud.	15:11:11	15:18:27	00:07:16	50.40432, -	50.40463,	A5.2 - Subtidal	Sublittoral sands	SS.SSa
		Paguridae, Asterias rubens and				3.50157	-3.50100	Sand	and muddy sands	
25/00/2053	CT4 C C4	Actinopterygii present.	42.04.40	12.00.50	00.04.41	50 22675	50 22625	112	Editor do como d	CD MCD F-C
26/09/2013	GT16_S1	Large boulders throughout the	13:04:48	13:08:59	00:04:11	50.33675, -	50.33635,	A4.2 -	Echinoderms and	CR.MCR.EcCr
		video surrounded by a mixture of sand, mud, shell, gravel, cobbles,				3.51835	-3.51837	Moderate	crustose	
		pebbles and occasional areas of						Energy Circalittoral	communities	
		bedrock. Rope also seen.						Rock		
		Asterias rubens, Antedon bifida						NUCK		
		and Alcyonium digitatum								
		observed								
	1	ODJC: VCU				1	1	1		

# B. Summary of Stills Information

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
25/09/2013	GT08	Slightly muddy sand with some empty shell.	GT08_S1_Img.002	50.4951, -3.5103333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT08	Slightly muddy sand with some empty shell. No fauna observed	GT08_S1_Img.003	50.4950666 -3.5104833	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT08	Slightly muddy sand with some empty shell. No fauna observed	GT08_S1_Img.004	50.49505 -3.5105333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT08	Slightly muddy sand. No fauna observed	GT08_S1_Img.005	50.4950166 -3.5106333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT08	Slightly muddy sand with some empty shell. Ebalia sp. present	GT08_S1_Img.006	50.495 -3.5106833	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT08	Slightly muddy sand with some empty shell. No fauna observed	GT08_S1_Img.007	50.4949833 -3.5106999	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT08	Slightly muddy sand. No fauna observed	GT08_S1_Img.008	50.49495 -3.5107499	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT08	Slightly muddy sand. No fauna observed	GT08_S1_Img.009	50.4949333 -3.5107999	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT08	Slightly muddy sand with some empty shell. Pagurus bernhardus and hydroid/bryozoan turf present	GT08_S1_Img.010	50.4949166 -3.5109666	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT08	Slightly muddy sand with some empty shell. Asterias rubens observed	GT08_S1_Img.011	50.4949166 -3.5110333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT08	Slightly muddy sand with some empty shell.	GT08_S1_Img.012	50.4949 -3.5111333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT08	Slightly muddy sand with some empty shell.	GT08_S1_Img.013	50.4949 -3.5112166	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT09	Still is too blurred to analyse	GT09_S1_Img.002	50.4675666 -3.4847333			
25/09/2013	GT09	Still is too blurred to analyse	GT09_S1_Img.003	50.4674 -3.48475			
25/09/2013	GT09	Still is too blurred to analyse	GT09_S1_Img.004	50.4673 -3.4847499			
25/09/2013	GT09	Still is too blurred to analyse	GT09_S1_Img.005	50.4672166 -3.48475			
25/09/2013	GT09	Still is too blurred to analyse	GT09_S1_Img.006	50.4671333 -3.4847499			

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
25/09/2013	GT09	Still is too blurred to analyse	GT09_S1_Img.007	50.4670666 -3.4847333			
25/09/2013	GT09	Slightly muddy sand with some empty shell. Pagurus bernhardus present	GT09_S1_Img.008	50.4667833 -3.4846666	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT09	Slightly muddy sand with some empty shell. Hydroid/bryozoan turf present	GT09_S1_Img.009	50.4666666 -3.4846333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT09	Slightly muddy sand with some empty shell. No fauna observed	GT09_S1_Img.010	50.4666166 -3.4846166	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT09	Slightly muddy sand with some empty shell. Pagurus bernhardus and hydroid/bryozoan turf present	GT09_S1_Img.011	50.4665333 -3.4845833	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT09	Slightly muddy sand with some empty shell. Pagurus bernhardus present	GT09_S1_Img.012	50.4663333 -3.4844499	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT09	Slightly muddy sand with some empty shell. No fauna observed	GT09_S1_Img.013	50.4661 -3.4843	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT09	Slightly muddy sand with some empty shell. Hydroid/bryozoan turf present	GT09_S1_Img.014	50.4660333 -3.48425	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT09	Slightly muddy sand with some empty shell.	GT09_S1_Img.015	50.4659166 -3.4841666	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT09	Slightly muddy sand. Pagurus bernhardus and Calliactis parasitica observed	GT09_S1_Img.016	50.4658833 -3.4841333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
25/09/2013	GT05	Bedrock covered by a layer of muddy sand and empty shells. Alcyionium digitatum, Porifera and Callionymus present	GT05_S1_Img.002	50.46035 -3.4634166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
25/09/2013	GT05	Bedrock covered by a layer of muddy sand and empty shells. Alcyionium digitatum, Asterias rubens, Sagartia elegans and Nemetesia anteninna observed	GT05_S1_Img.003	50.4603333 -3.4634499	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
25/09/2013	GT05	Mixture of muddy sand, empty shell, gravel and pebbles. Nemertesia anteninna, Corallinaceae and Porifera observed	GT05_S1_Img.004	50.46025 -3.4635333	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
25/09/2013	GT05	Bedrock covered by a layer of muddy sand and empty shells. Alcyionium digitatum, Asterias rubens and Callionymus present	GT05_S1_Img.005	50.4602333 -3.4635666	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
25/09/2013	GT05	Mixture of muddy sand, empty shell, cobbles and pebbles. Corallinaceae, Asterias rubens and Porifera observed	GT05_S1_Img.006	50.4602 -3.4636166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
25/09/2013	GT05	Bedrock covered by a layer of muddy sand	GT05_S1_Img.007	50.4601833	A4.2 - Moderate	Echinoderms and crustose	CR.MCR.EcCr

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
		and empty shells. Alcyionium digitatum, Asterias rubens and Urticina felina observed		-3.4636499	Energy Circalittoral Rock	communities	
25/09/2013	GT05	Bedrock covered by a layer of muddy sand and empty shells. Paguridae, Corallinaceae and hydroid/bryozoan turf	GT05_S1_Img.008	50.4600833 -3.4637833	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
25/09/2013	GT05	Clear division between bedrock covered by a layer of muddy sand and empty shells next to an area of muddy sand with empty shells, pebbles and cobbles. Corallinaceae and Spirobranchus sp observed	GT05_S1_Img.009	50.45995 -3.4639499	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
25/09/2013	GT05	Bedrock covered by a layer of muddy sand and empty shells. Maja brachydactlya, Porifera and Hydroid/bryozoan turf	GT05_S1_Img.010	50.4599333 -3.4639833	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
25/09/2013	GT05	Bedrock covered by a layer of muddy sand and empty shells. Porifera and Hydroid/bryozoan turf	GT05_S1_Img.011	50.4598666 -3.4640666	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
25/09/2013	GT05	Mixture of muddy sand, empty shell, cobbles and pebbles. Nemertesia anteninna, Corallinaceae and Spirobranchus sp observed	GT05_S1_Img.012	50.4597666 -3.4641833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
25/09/2013	GT05	Bedrock covered by a layer of muddy sand and empty shells. Maja brachydactlya, Asterias rubens and Alcyonium digitatum observed	GT05_S1_Img.013	50.4596 -3.46435	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
25/09/2013	GT05	Clear division between bedrock covered by a layer of muddy sand and empty shells next to an area of muddy sand with empty shells, pebbles and cobbles. Corallinaceae and Spirobranchus sp observed	GT05_S1_Img.014	50.4595333 -3.4644166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
25/09/2013	GT05	Bedrock covered by a layer of muddy sand and empty shells. Corallinaceae, Spirobranchus sp and Porifera observed	GT05_S1_Img.015	50.45945 -3.4645166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
25/09/2013	GT05	Mixture of muddy sand, empty shell, cobbles and pebbles. Asterias rubens, Crepidula fornicata and Porifera observed	GT05_S1_Img.016	50.45935 -3.4646333	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
25/09/2013	GT10	Slightly sandy and silted bedrock. Alcyonium digitatum, Antedon bifida and Necora puber observed	GT10_S1_Img.002	50.4562166 -3.4688999	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
25/09/2013	GT10	Half of the still is slightly silted bedrock covered by some empty shells, and the other half is shell and gravel. Antedon bifida, Asterias rubens and Nemertesia anteninna	GT10_S1_Img.003	50.45615 -3.4689833	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
		observed					
25/09/2013	GT10	Slightly sandy and silted bedrock with some empty shell. Antedon bifida, Cellaria sp and Asterias rubens observed	GT10_S1_Img.004	50.45605 -3.46905	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
25/09/2013	GT10	Mixture of muddy sand, gravel, pebbles and empty shell. Asterias rubens observed	GT10_S1_Img.005	50.4557 -3.4692999	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
25/09/2013	GT10	Half of the still is slightly silted bedrock and the other have is a mixture of sand, shell, pebbles and gravel. Cellaria sp, Necora puber, Carcinus maenas and Asterias rubens observed	GT10_S1_Img.006	50.4555 -3.4694333	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
25/09/2013	GT10	Bedrock covered by sand, shell, gravel and cobbles. Cellaria, Corallinaceae, Porifera and Inachus sp observed	GT10_S1_Img.015	50.4553833 -3.4695166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
25/09/2013	GT10	Bedrock covered by some sand and empty shell. Cellaria sp, Alcyonium digitatum and hydroid/bryozoan turf observed	GT10_S1_Img.016	50.4550166 -3.4697999	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
25/09/2013	GT10	Bedrock covered by some sand and empty shell. Cellaria sp, Antedon bifida and hydroid/bryozoan turf observed	GT10_S1_Img.017	50.4546666 -3.4700333	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
25/09/2013	GT10	Bedrock covered by some sand and empty shell. Cellaria sp, Antedon bifida and hydroid/bryozoan turf observed	GT10_S1_Img.018	50.4541666 -3.4705166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
25/09/2013	GT10	Mixture of muddy sand and empty shell. Asterias rubens and Spirobranchus sp observed	GT10_S1_Img.019	50.4540166 -3.4707333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT24	A mixture of coarse sand with gravel and empty shells. No fauna.	GT24_S1_Img.002	50.3151 -3.6097666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT24	A mixture of coarse sand with gravel and empty shells. No fauna.	GT24_S1_Img.003	50.3151 -3.61	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT24	A mixture of coarse sand with gravel and empty shells. No fauna.	GT24_S1_Img.004	50.3150833 -3.6102499	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT24	A mixture of coarse sand with gravel and empty shells. No fauna.	GT24_S1_Img.005	50.3150666 -3.6104666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT24	A mixture of coarse sand with gravel and empty shells. No fauna.	GT24_S1_Img.006	50.3150666 -3.6106166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
26/09/2013	GT24	A mixture of coarse sand with gravel and empty shells. Rhodophyta present.	GT24_S1_Img.007	50.3150833 -3.6107666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT24	A mixture of coarse sand with gravel and empty shells. Rhodophyta present.	GT24_S1_Img.008	50.3151 -3.6109166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT24	A mixture of coarse sand with gravel and empty shells. No fauna.	GT24_S1_Img.009	50.3151333 -3.6110499	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT24	A mixture of coarse sand with gravel and empty shells. No fauna.	GT24_S1_Img.010	50.3152 -3.6112166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT24	A mixture of coarse sand with gravel and empty shells. No fauna.	GT24_S1_Img.011	50.3152333 -3.6113333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT24	A mixture of coarse sand with gravel and empty shells. No fauna.	GT24_S1_Img.012	50.3152833 -3.6114333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT31	Fine slightly muddy sand. No fauna.	GT31_S1_Img.002	50.3164166 -3.60175	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT31	Fine slightly muddy sand. No fauna.	GT31_S1_Img.003	50.3164166 -3.6018499	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT31	Fine slightly muddy sand. No fauna.	GT31_S1_Img.004	50.3164666 -3.60195	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT31	A mixture of fine slightly muddly sand and gravel. Ophiura present.	GT31_S1_Img.005	50.3165333 -3.6019666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT31	A mixture of fine slightly muddy sand and gravel. Asterias rubens present.	GT31_S1_Img.006	50.3166 -3.6019166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT31	A mixture of fine slightly muddy sand and gravel. No fauna.	GT31_S1_Img.007	50.3165833 -3.6019833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT31	A mixture of fine slightly muddy sand and gravel. No fauna.	GT31_S1_Img.008	50.31645 -3.6021166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT31	A mixture of fine slightly muddy sand and gravel. Asterias rubens present.	GT31_S1_Img.009	50.31635 -3.6021666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT31	A mixture of fine slightly muddy sand and gravel. No fauna.	GT31_S1_Img.010	50.3162666 -3.6022166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT31	Silted bedrock. Rhodophyta, Nemertesia and Porifera.	GT31_S1_Img.011	50.3162333 -3.6022333	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT31	Silted bedrock. Rhodophyta, Nemertesia and	GT31_S1_Img.012	50.3162333	A4.2 - Moderate	Echinoderms and crustose	CR.MCR.EcCr

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
	·	Cirripedia.	·	-3.6022499	Energy Circalittoral Rock	communities	<u> </u>
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. No fauna.	GT25_S1_Img.002	50.317 -3.5947666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. Spirobranchus present.	GT25_S1_Img.003	50.317 -3.59485	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. Ophiura present.	GT25_S1_Img.004	50.317 -3.5948833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. Ophiura and Spirobranchus present.	GT25_S1_Img.005	50.3170166 -3.5949833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. Ophiura and Spirobranchus present.	GT25_S1_Img.006	50.3170333 -3.59505	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. No fauna.	GT25_S1_Img.007	50.31705 -3.5951833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. Asterias rubens, Ophiura and Spirobranchus.	GT25_S1_Img.008	50.3171 -3.5952666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. Spirobranchus present.	GT25_S1_Img.009	50.3171166 -3.5953166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. Spirobranchus present.	GT25_S1_lmg.010	50.3172 -3.5954333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. Spirobranchus present.	GT25_S1_lmg.011	50.3172166 -3.5954833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. Spirobranchus present.	GT25_S1_lmg.012	50.3172833 -3.5955833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. No fauna.	GT25_S1_Img.013	50.3173166 -3.5956499	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. Spirobranchus present.	GT25_S1_lmg.014	50.3174 -3.5957333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. Spirobranchus present.	GT25_S1_Img.015	50.3174166 -3.59575	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. Spirobranchus present.	GT25_S1_lmg.016	50.3174333 -3.5957833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT25	A mixture of coarse sand with gravel and	GT25_S1_Img.017	50.31745	A5.4 - Subtidal Mixed	Sublittoral mixed sediment	SS.SMx

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
	·	empty shells. Ophiura and Spirobranchus present.		-3.5958166	Sediment		
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. No fauna.	GT25_S1_Img.018	50.3174666 -3.5958499	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT25	A mixture of coarse sand with gravel and empty shells. No fauna.	GT25_S1_Img.019	50.3175 -3.5958999	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT27	Mostly gravelly sand with some small broken shells and pebbles. Ophiura present.	GT27_S1_Img.002	50.3186166 -3.5830833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT27	Mostly gravelly sand with some small broken shells and pebbles. Ophiura present.	GT27_S1_Img.003	50.3186333 -3.58315	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT27	Mostly gravelly sand with some small broken shells and pebbles. Ophiura present.	GT27_S1_Img.004	50.3186833 -3.5832333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT27	Mostly gravelly sand with some small broken shells and pebbles. Ophiura present.	GT27_S1_Img.005	50.3187166 -3.5832666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT27	Mostly gravelly sand with some small broken shells and pebbles. Ophiura present.	GT27_S1_Img.006	50.3188166 -3.5833333	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT27	Mostly gravelly sand with some small broken shells and pebbles. Ophiura present.	GT27_S1_Img.007	50.3188666 -3.5833666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT27	Mostly gravelly sand with some small broken shells and pebbles. Ophiura present.	GT27_S1_Img.008	50.3189333 -3.58345	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT27	Mostly gravelly sand with some small broken shells and pebbles. Ophiura present.	GT27_S1_Img.009	50.319 -3.5835666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT26	Silted bedrock. Porifera and Cirripedia present	GT26_S1_Img.003	50.3275333 -3.5625	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT26	Silted bedrock. Asterias rubens, Phyllophora crispa, Spirobranchus and Cirripedia.	GT26_S1_Img.004	50.3275833 -3.5625	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT26	Silted bedrock. Phyllophora crispa, Cirripedia and Spirobranchus.	GT26_S1_Img.005	50.3276166 -3.5625166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT26	Mixture of silted bedrock and coarse sand and gravel with empty shells. Spirobranchus and Porifera.	GT26_S1_Img.006	50.3276833 -3.5625666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT26	Silted bedrock. Phyllophora crispa, Cancer	GT26_S1_Img.007	50.3277333	A4.2 - Moderate	Echinoderms and crustose	CR.MCR.EcCr

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
		pagurus and Cirripedia.		-3.5625833	Energy Circalittoral Rock	communities	
26/09/2013	GT26	Silted large boulders with some smaller cobbles and pebbles. Spirobranchus and Cirripedia.	GT26_S1_Img.008	50.3278833 -3.5626833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT26	Silted large boulders with some smaller cobbles, pebbles and empty shells. Porifera and Hydrozoan/Bryozoan turf.	GT26_S1_Img.009	50.3280333 -3.5626833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT26	Mostly pebbles and empty shells with some coarse sand and mud. Asterias rubens and Spirobranchus.	GT26_S1_Img.010	50.3280833 -3.5626166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT26	Mostly pebbles and empty shells with some coarse sand and mud. Spirobranchus present.	GT26_S1_Img.011	50.32815 -3.5625166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT26	Mostly pebbles and empty shells with some coarse sand and mud. Spirobranchus and Paguridae present.	GT26_S1_Img.012	50.3282666 -3.5623666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT26	Mostly pebbles and empty shells with some coarse sand and mud. Spirobranchus present.	GT26_S1_Img.013	50.3284 -3.5622666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT26	Mostly pebbles and empty shells with some coarse sand and mud. Spirobranchus and Ophiura present.	GT26_S1_Img.014	50.3285166 -3.5622166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT26	Mostly pebbles and empty shells with some coarse sand and mud. Asterias rubens and Spirobranchus.	GT26_S1_Img.015	50.3285666 -3.5622166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT26	Mostly pebbles and empty shells with some coarse sand and mud. Spirobranchus, Paguridae and Ophiura present.	GT26_S1_Img.016	50.3286166 -3.5621999	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT26	Mostly pebbles and empty shells with some coarse sand and mud. Spirobranchus and Ophiura present.	GT26_S1_Img.017	50.32865 -3.5621999	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT26	Mostly pebbles and empty shells with some coarse sand and mud. Spirobranchus and Ophiura present.	GT26_S1_Img.018	50.3287166 -3.5621499	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT28	Fine slightly muddy sand. No fauna.	GT28_S1_Img.002	50.3336666 -3.5580333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT28	Fine slightly muddy sand. Ophiura present.	GT28_S1_Img.003	50.3337166 -3.5580499	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
26/09/2013	GT28	Fine slightly muddy sand. Ophiura present.	GT28_S1_Img.004	50.3338 -3.5580833	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT28	Fine slightly muddy sand. Ophiura present.	GT28_S1_Img.005	50.33385 -3.5580999	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT28	Fine slightly muddy sand. Ophiura present.	GT28_S1_Img.006	50.3339166 -3.5581166	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT28	Fine slightly muddy sand. Ophiura present.	GT28_S1_Img.007	50.3339833 -3.5581333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT28	Fine slightly muddy sand. Ophiura present.	GT28_S1_Img.008	50.3341 -3.5581666	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT28	Fine slightly muddy sand. Ophiura present.	GT28_S1_Img.009	50.3341833 -3.5581833	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT28	Fine slightly muddy sand. No fauna.	GT28_S1_Img.010	50.3342833 -3.5582499	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT28	Fine slightly muddy sand. No fauna.	GT28_S1_Img.011	50.3343666 -3.5582999	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT33	Fine slightly muddy sand. No fauna.	GT33_S1_Img.002	50.3361166 -3.5469499	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT33	Fine slightly muddy sand. Tracks from anthropogenic dredging. No fauna.	GT33_S1_Img.003	50.3361166 -3.5469333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT33	Fine slightly muddy sand. No fauna.	GT33_S1_Img.004	50.33615 -3.5468833	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT33	Fine slightly muddy sand. No fauna.	GT33_S1_Img.005	50.3361666 -3.5468666	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT33	Fine slightly muddy sand with a couple of empty shells. No fauna.	GT33_S1_Img.006	50.3361833 -3.5468499	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT33	Fine slightly muddy sand. No fauna.	GT33_S1_Img.007	50.3362 -3.5468166	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT33	Fine slightly muddy sand. No fauna.	GT33_S1_Img.008	50.3362333 -3.5467666	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT33	Fine slightly muddy sand. No fauna.	GT33_S1_Img.009	50.3362666 -3.54675	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT33	Fine slightly muddy sand. No fauna.	GT33_S1_Img.010	50.3362833 -3.5467	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT33	Fine slightly muddy sand. Fucus serratus.	GT33_S1_Img.011	50.3363166 -3.5466499	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT33	Fine slightly muddy sand with a couple of	GT33_S1_Img.012	50.3363666	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
		empty shells. No fauna.		-3.5465666		- Comment (Comment Company)	, , , , , ,
26/09/2013	GT33	Fine slightly muddy sand. No fauna.	GT33_S1_Img.013	50.3364 -3.5465	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT29	Fine slightly muddy sand. No fauna.	GT29_S1_Img.002	50.3256833 -3.5417	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT29	Fine slightly muddy sand. No fauna.	GT29_S1_Img.003	50.32575 -3.5416833	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT29	Fine slightly muddy sand. No fauna.	GT29_S1_Img.004	50.3258166 -3.54165	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT29	Fine slightly muddy sand. No fauna.	GT29_S1_Img.005	50.3259 -3.5416499	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT29	Fine slightly muddy sand. No fauna.	GT29_S1_Img.006	50.3260333 -3.5416166	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT29	Fine slightly muddy sand. No fauna.	GT29_S1_Img.007	50.3261166 -3.5415833	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT29	Fine slightly muddy sand. No fauna.	GT29_S1_Img.008	50.32615 -3.5415666	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT29	Fine slightly muddy sand. No fauna.	GT29_S1_Img.009	50.3262166 -3.5415666	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT29	Fine slightly muddy sand. Asterias rubens present.	GT29_S1_Img.010	50.32625 -3.5415666	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT29	Fine slightly muddy sand. No fauna.	GT29_S1_Img.011	50.3263333 -3.54155	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT29	Fine slightly muddy sand. No fauna.	GT29_S1_Img.012	50.3264666 -3.5415333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT30	Fine slightly muddy sand. Spirobranchus present.	GT30_S1_Img.002	50.3290666 -3.5277833	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT30	Fine slightly muddy sand. No fauna.	GT30_S1_Img.003	50.3290833 -3.5277833	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT30	Fine slightly muddy sand. No fauna.	GT30_S1_Img.004	50.3292333 -3.5277333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT30	Fine slightly muddy sand. No fauna.	GT30_S1_Img.005	50.3293666 -3.5277333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT30	Fine slightly muddy sand. No fauna.	GT30_S1_Img.006	50.3294333 -3.5277166	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT30	Fine slightly muddy sand. No fauna.	GT30_S1_Img.007	50.3295833 -3.5277	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
26/09/2013	GT30	Fine slightly muddy sand. No fauna.	GT30_S1_Img.008	50.3296666 -3.5276833	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT30	Fine slightly muddy sand. No fauna.	GT30_S1_Img.009	50.3297833 -3.5276166	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT30	Fine slightly muddy sand. No fauna.	GT30_S1_Img.010	50.3298833 -3.5275833	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT30	Fine slightly muddy sand. Ophiura present.	GT30_S1_Img.011	50.3299333 -3.52755	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
26/09/2013	GT35	Mostly gravelly sand with some small broken shells and pebbles. Paguridae and Ulva? Present.	GT35_S1_Img.002	50.3304666 -3.5381666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT35	Mostly gravelly sand with some small broken shells and pebbles. No fauna.	GT35_S1_Img.003	50.3304833 -3.5381166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT35	Mostly gravelly sand with some small broken shells and pebbles. Pecten maximus, Ophiuridae and Paguridae.	GT35_S1_Img.004	50.3305 -3.5380499	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT35	Mostly gravelly sand with some small broken shells and pebbles. Sertularia and Ophiuridae.	GT35_S1_Img.005	50.3305166 -3.5379999	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT35	Mostly gravelly sand with some small broken shells and pebbles. Poor quality image, no fauna visible.	GT35_S1_Img.006	50.3305333 -3.5379499	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT35	Mostly gravelly sand with some small broken shells and pebbles. Astropecten irregularis present.	GT35_S1_Img.007	50.33055 -3.5379166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT35	Mostly gravelly sand with some small broken shells and pebbles. Paguridae and Ebalia.	GT35_S1_Img.008	50.33055 -3.5378666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT35	Mostly gravelly sand with some small broken shells and pebbles. No fauna.	GT35_S1_Img.009	50.3305666 -3.5377666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT35	Mostly gravelly sand with some small broken shells and pebbles. Zostera?, Ophiuridae and Spirorbidae.	GT35_S1_Img.010	50.33055 -3.5377333	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT35	Mostly gravelly sand with some small broken shells and pebbles. Paguridae, Ebalia and Ophiuridae.	GT35_S1_Img.011	50.3305333 -3.5377	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A1	Silted bedrock. Cliona celata, Asterias rubens	GT32_A1_S1_Img.002	50.3362666	A4.2 - Moderate	Echinoderms and crustose	CR.MCR.EcCr

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
	·	and Alcyonium digitatum.		-3.5258999	Energy Circalittoral Rock	communities	
26/09/2013	GT32_A1	Silted bedrock. Urticina felina, Nemertesia, Asterias rubens and Alcyonium digitatum.	GT32_A1_S1_Img.003	50.3362666 -3.5259333	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A1	Silted bedrock. Urticina felina, Nemertesia, Asterias rubens and Alcyonium digitatum.	GT32_A1_S1_Img.004	50.3362666 -3.52595	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A1	A mixture of silted bedrock and coarse sand, gravel and empty shells. Urticina felina, Asterias rubens and Alcyonium digitatum.	GT32_A1_S1_Img.005	50.3362666 -3.5259666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A1	A mixture of silted bedrock and coarse sand, gravel and empty shells. Urticina felina, Antedon bifidaand Alcyonium digitatum.	GT32_A1_S1_Img.006	50.3362666 -3.5259666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A1	Silted bedrock. Urticina felina, Antedon bifida, and Alcyonium digitatum.	GT32_A1_S1_Img.007	50.3362833 -3.526	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A1	Silted bedrock. Urticina felina, and Alcyonium digitatum.	GT32_A1_S1_Img.008	50.3362833 -3.5260166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A1	Silted bedrock. Urticina felina, Antedon bifida, Asterias rubens and Alcyonium digitatum.	GT32_A1_S1_Img.009	50.3362833 -3.5260166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A1	Silted bedrock. Cliona celata and Urticina felina.	GT32_A1_S1_Img.010	50.3363 -3.5260333	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A1	Silted bedrock. Urticina felina, Nemertesia, and Alcyonium digitatum.	GT32_A1_S1_Img.011	50.3363 -3.5260666	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A1	Silted bedrock. Urticina felina, Asterias rubens and Alcyonium digitatum.	GT32_A1_S1_Img.012	50.3363 -3.5260833	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A1	Silted bedrock. Urticina felina, Asterias rubens, Antedon bifida and Alcyonium digitatum.	GT32_A1_S1_Img.013	50.3363 -3.5260999	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A1	Silted bedrock. Urticina felina, Asterias rubens, Antedon bifida and Nemertesia.	GT32_A1_S1_Img.014	50.3363 -3.5260999	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A1	Silted bedrock. Urticina felina present.	GT32_A1_S1_Img.015	50.3363 -3.5260999	A4.2 - Moderate Energy Circalittoral	Echinoderms and crustose communities	CR.MCR.EcCr

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
					Rock		
26/09/2013	GT32_A1	Silted bedrock. Cliona celata, Urticina felina, Antedon bifida and Alcyonium digitatum.	GT32_A1_S1_Img.016	50.3363166 -3.5261166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A1	Mostly pebbles and gravel with some cobbles and sand. No faunal visible.	GT32_A1_S1_Img.017	50.3363333 -3.5261333	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A1	Mostly pebbles and gravel with some cobbles and sand. No faunal visible.	GT32_A1_S1_Img.018	50.33635 -3.5261499	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A1	Mostly pebbles and gravel with some cobbles and sand. Lobster pot and Cancer pagurus present.	GT32_A1_S1_Img.019	50.3363666 -3.5261666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A1	Mostly pebbles and gravel with some cobbles and sand. No faunal visible.	GT32_A1_S1_Img.020	50.3364166 -3.5262333	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A1	Mostly pebbles and gravel with some cobbles and sand. No faunal visible.	GT32_A1_S1_Img.021	50.3365166 -3.5262666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A1	Mostly pebbles and gravel with some cobbles and sand. No faunal visible.	GT32_A1_S1_Img.022	50.3365833 -3.5263	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A1	Mostly pebbles and gravel with some cobbles and sand. No faunal visible.	GT32_A1_S1_Img.023	50.3366333 -3.5263333	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A1	Mostly pebbles and gravel with some cobbles and sand. No faunal visible.	GT32_A1_S1_Img.024	50.3366666 -3.5263333	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A1	Mostly pebbles and gravel with some cobbles and sand. Asterias rubens present.	GT32_A1_S1_Img.025	50.3367 -3.5263666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A1	Mostly pebbles and gravel with some cobbles and sand. No faunal visible.	GT32_A1_S1_Img.026	50.3367833 -3.5264	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A1	A mixture of silted bedrock and coarse sand, gravel and empty shells. Alcyonium digitatum.	GT32_A1_S1_Img.027	50.3368166 -3.5264166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A1	Mostly pebbles and gravel with some cobbles and sand. No faunal visible.	GT32_A1_S1_Img.028	50.3368833 -3.5264499	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
26/09/2013	GT32_A1	Mostly pebbles and gravel with some cobbles and sand. Asterias rubens present.	GT32_A1_S1_Img.029	50.3369 -3.5264666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	Mostly pebbles and gravel with some cobbles and sand. No faunal visible.	GT32_A2_S1_Img.003	50.33605 -3.5254166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	Mostly pebbles and gravel with some cobbles and sand. Spirobranchus present.	GT32_A2_S1_Img.004	50.33605 -3.5254333	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	Mostly pebbles and gravel with some cobbles and sand. Asterias rubens and Spirobranchus.	GT32_A2_S1_Img.005	50.3360833 -3.5254666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	A mixture of silted bedrock and coarse sand, gravel and empty shells. Alcyonium digitatum, Urticina felina and Asterias rubens	GT32_A2_S1_Img.006	50.3361166 -3.5255166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	Mostly pebbles and gravel with some cobbles and sand. Spirobranchus present.	GT32_A2_S1_Img.007	50.3361 -3.5255166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	Mostly pebbles and gravel with some cobbles and sand. Spirobranchus present.	GT32_A2_S1_Img.008	50.33605 -3.5255666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	Mostly pebbles and gravel with some cobbles and sand. Ophiura, Paguridae and Spirobranchus.	GT32_A2_S1_Img.009	50.3360333 -3.5255833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	A mixture of silted bedrock and coarse sand, gravel and empty shells. Cellaria sp, Nicora puber, and Alcyonium digitatum.	GT32_A2_S1_Img.010	50.3360333 -3.5255999	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A2	Mostly pebbles and gravel with some cobbles and sand. Spirobranchus present.	GT32_A2_S1_Img.011	50.3359833 -3.5255999	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	Mostly pebbles and gravel with some cobbles and sand. Spirobranchus present.	GT32_A2_S1_Img.012	50.3359666 -3.5255999	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	Mostly pebbles and gravel with some cobbles and sand. Asterias rubens, and Spirobranchus.	GT32_A2_S1_Img.013	50.33595 -3.5256166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	Mostly pebbles and gravel with some cobbles and sand. Asterias rubens, Ophiura and Spirobranchus.	GT32_A2_S1_Img.014	50.3359333 -3.5256666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	Mostly pebbles and gravel with some cobbles	GT32_A2_S1_Img.015	50.3359	A5.1 - Subtidal Coarse	Sublittoral coarse sediment	SS.SCS

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
		and sand. Spirobranchus, Ophiura and Antedon bifida present.	-	-3.5257166	Sediment	(unstable cobbles and pebbles, gravels and coarse sands)	
26/09/2013	GT32_A2	Mostly pebbles and gravel with some cobbles and sand. Asterias rubens, Ophiura and Spirobranchus.	GT32_A2_S1_Img.016	50.3358 -3.5257499	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	Mostly pebbles and gravel with some cobbles and sand. Ophiura and Spirobranchus.	GT32_A2_S1_Img.017	50.33575 -3.5257666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	Mostly pebbles and gravel with some cobbles and sand. No faunal visible.	GT32_A2_S1_Img.018	50.3357333 -3.5257833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	Mostly pebbles and gravel with some cobbles and sand. Asterias rubens and Spirobranchus.	GT32_A2_S1_Img.019	50.3357 -3.5257666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	A mixture of silted bedrock and coarse sand, gravel and empty shells. Metridium senile present.	GT32_A2_S1_Img.020	50.3356833 -3.5257833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	A mixture of silted bedrock and coarse sand, gravel and empty shells. Metridium senile, Urticina felina and Spirobranchus.	GT32_A2_S1_Img.021	50.3356833 -3.5257999	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT32_A2	Silted bedrock with some gravelly sand. Metridium senile, Alcyonium digitatum and Sagartia elegans.	GT32_A2_S1_Img.022	50.3356666 -3.5258333	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A2	Silted bedrock with some gravelly sand. Metridium senile, Alcyonium digitatum, Urticina felina and Sagartia elegans.	GT32_A2_S1_Img.023	50.33565 -3.52585	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A2	Silted bedrock. Metridium senile, Alcyonium digitatum, Urticina felina and Maja brachydactyla.	GT32_A2_S1_Img.024	50.33565 -3.5258666	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A2	Silted bedrock. Metridium senile, Alcyonium digitatum, Urticina felina and Sagartia elegans.	GT32_A2_S1_Img.025	50.3356333 -3.5258833	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT32_A2	Silted bedrock. Metridium senile, Alcyonium digitatum, Esperiopsis fucorum and Nemertesia.	GT32_A2_S1_Img.026	50.3355666 -3.5259166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT16	Mixture of sand, gravel, shell, pebbles and cobbles. Asterias rubens, Ophiura sp and Spirobranchus sp observed	GT16_S1_Img.002	50.33675 -3.5183499	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT16	Mixture of sand, gravel, shell, pebbles and cobbles. Porifera, Ophiura sp and	GT16_S1_Img.003	50.33665 -3.5183666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles,	SS.SCS

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
		Spirobranchus sp observed				gravels and coarse sands)	
26/09/2013	GT16	Mixture of sand, gravel, shell, pebbles and cobbles. Asterias rubens, Ophiura sp and Spirobranchus sp observed	GT16_S1_Img.004	50.3366 -3.5183833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT16	Mixture of sand, gravel, shell and pebbles. Spirobranchus sp observed	GT16_S1_Img.005	50.3365 -3.5183666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT16	Medium sized boulders next to sand with some empty shell. Alcyonium digitatum, Antedon bifida and Asterias rubens observed	GT16_S1_Img.006	50.3364666 -3.5183666	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT16	Medium sized boulders next to sand with some empty shell. Antedon bifida and Asterias rubens observed	GT16_S1_Img.007	50.3364333 -3.5183666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT16	Silted bedrock. Alcyonium digitatum, Antedon bifida and hydroid/bryozoan turf observed	GT16_S1_Img.008	50.3364166 -3.5183666	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT16	Unable to see the sea bed and determine sediment type	GT16_S1_Img.009	50.3363666 -3.5183666			
26/09/2013	GT16	Medium sized boulders next to sand with some empty shell and gravel. Antedon bifida, Spirobranchus sp and Asterias rubens observed	GT16_S1_Img.010	50.33635 -3.5183666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT22	Mostly pebbles and gravel with some cobbles and sand. Spirobranchus present.	GT22_S1_Img.002	50.3371333 -3.4993166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT22	Inadequate still, water column only. No fauna.	GT22_S1_Img.003	50.3371333 -3.4994999			
26/09/2013	GT22	Silted bedrock. Eunicella verrucosa and Alcyonium digitatum.	GT22_S1_Img.004	50.3371333 -3.4995333	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT22	Inadequate still, water column only. Antedon bifida only.	GT22_S1_Img.005	50.3370666 -3.4998333			
26/09/2013	GT23	A mixture of fine slightly muddy sand with some coarser sand and gravel. No fauna.	GT23_S1_Img.003	50.3450333 -3.5083666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT23	A mixture of fine slightly muddy sand with some coarser sand and gravel. No fauna.	GT23_S1_Img.004	50.3449833 -3.5085499	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT23	A mixture of fine slightly muddy sand with some coarser sand and gravel. No fauna.	GT23_S1_Img.005	50.34495 -3.5086166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT23	A mixture of fine slightly muddy sand with	GT23_S1_Img.006	50.3449	A5.4 - Subtidal Mixed	Sublittoral mixed sediment	SS.SMx

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
	·	some coarser sand and gravel. No fauna.	·	-3.5087833	Sediment	, , ,	
26/09/2013	GT23	A mixture of fine slightly muddy sand with some coarser sand and gravel. No fauna.	GT23_S1_Img.007	50.3448166 -3.5091166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT23	A mixture of fine slightly muddy sand with some coarser sand and gravel. No fauna.	GT23_S1_Img.008	50.3447 -3.5095333	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT23	A mixture of fine slightly muddy sand with some coarser sand and gravel. No fauna.	GT23_S1_Img.009	50.34455 -3.5099666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT23	A mixture of fine slightly muddy sand with some coarser sand and gravel. No fauna.	GT23_S1_Img.010	50.3444333 -3.5103666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT23	A mixture of fine slightly muddy sand with some coarser sand and gravel. No fauna.	GT23_S1_Img.011	50.3442666 -3.5108333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT23	A mixture of fine slightly muddy sand with some coarser sand and gravel. No fauna.	GT23_S1_Img.012	50.3441833 -3.5111333	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT18	Unable to see the sea bed and determine sediment type	GT18_S1_Img.001	50.3549 -3.50315			
26/09/2013	GT18	Bedrock covered by a layer of muddy sand and empty shells. Alcyonium digitatum, Sagartia elegans, Caryophyllia smithii and Cliona celata.	GT18_S1_Img.002	50.3548833 -3.5031999	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT18	Bedrock covered by a layer of muddy sand and empty shells. Alcyonium digitatum, Sagartia elegans and Nemertesia.	GT18_S1_Img.003	50.3547833 -3.5033666	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT18	Bedrock covered by a layer of muddy sand and empty shells. Sagartia elegans.	GT18_S1_Img.004	50.3547 -3.5035666	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT18	Bedrock covered by a layer of muddy sand and empty shells. Sagartia elegans and Cliona celata.	GT18_S1_Img.005	50.3546666 -3.5036499	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT18	Both heavily silted bedrock and coarse sand, gravel with empty shells. Sagartia elegans, Spirobranchus and Alcyonium digitatum.	GT18_S1_Img.006	50.3546166 -3.5038333	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT18	Bedrock covered by a layer of muddy sand and empty shells. Necora elegans, Spirobranchus and Porifera.	GT18_S1_Img.007	50.3544666 -3.5042	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT18	Bedrock covered by a layer of muddy sand and empty shells. Sagartia elegans,	GT18_S1_Img.008	50.35435 -3.5044833	A4.2 - Moderate Energy Circalittoral	Echinoderms and crustose communities	CR.MCR.EcCr

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
		Alcyonium digitatum and Didemnidae.			Rock		
26/09/2013	GT18	Bedrock covered by a layer of muddy sand and empty shells. Sagartia elegans, Alcyonium digitatum and Spirobranchus.	GT18_S1_Img.009	50.35425 -3.5047166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT18	A mixture of fine slightly muddy sand with some coarser sand, gravel and empty shells. No fauna.	GT18_S1_lmg.010	50.3540666 -3.5051166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT18	Bedrock covered by a layer of muddy sand and empty shells. Sagartia elegans, Cancer pagurus, Asterias rubens and Didemnidae.	GT18_S1_Img.011	50.354 -3.5052333	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT18	Both heavily silted bedrock and coarse sand, gravel with empty shells. Sagartia elegans, Alcyonium digitatum and Didemnidae.	GT18_S1_Img.012	50.3539 -3.50545	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT18	Bedrock covered by a layer of muddy sand and empty shells. Necora elegans, Sagartia elegans and Cliona celata.	GT18_S1_Img.013	50.3537833 -3.5057499	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT18	A mixture of fine slightly muddy sand with some coarser sand, gravel and empty shells. Spirobranchus and Porifera.	GT18_S1_Img.014	50.3537666 -3.5057833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT18	Unable to see the sea bed and determine sediment type	GT18_S1_Img.015	50.3537333 -3.5058666			
26/09/2013	GT18	A mixture of fine slightly muddy sand with some coarser sand, gravel and empty shells. Spirobranchus only.	GT18_S1_Img.016	50.3537 -3.5059499	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT18	A mixture of fine slightly muddy sand with some coarser sand, gravel and empty shells. Spirobranchus, Asterias rubens and Sagartia elegans.	GT18_S1_Img.017	50.3536666 -3.5060166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT18	Both heavily silted bedrock and coarse sand, gravel with empty shells. Urticina felina, Alcyonium digitatum and Spirobranchus.	GT18_S1_Img.018	50.35365 -3.5060833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT18	A mixture of fine slightly muddy sand with some coarser sand, gravel and empty shells. Spirobranchus only.	GT18_S1_Img.019	50.3536 -3.50625	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT18	Both heavily silted bedrock and coarse sand, gravel with empty shells. Porifera, Nemertesia and Spirobranchus.	GT18_S1_Img.020	50.3535666 -3.5063333	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT18	A mixture of fine slightly muddy sand with some coarser sand, gravel and empty shells. Spirobranchus, Asterias rubens and Sagartia	GT18_S1_Img.021	50.3534166 -3.5065999	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
		elegans.	-	_			
26/09/2013	GT18	A mixture of fine slightly muddy sand with some coarser sand, gravel and empty shells. Spirobranchus, and Asterias rubens.	GT18_S1_Img.022	50.3533 -3.5068833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
26/09/2013	GT21	Possible heavily silted bedrock. Antedon bifida, Nemertesia and Cellaria.	GT21_S1_lmg.002	50.3765333 -3.4934999	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
26/09/2013	GT21	Mixture of possible heavily silted bedrock with sand, mud and empty shells. Antedon bifida and Urticina felina.	GT21_S1_Img.003	50.3765166 -3.4935833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT21	A mixture of coarse sand with gravel and empty shells.	GT21_S1_Img.004	50.3764333 -3.4938833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT21	A mixture of fine slightly muddy sand and coarser sand.	GT21_S1_Img.005	50.37635 -3.4941666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT21	A mixture of coarse sand with gravel and empty shells. Spirobranchus present.	GT21_S1_Img.006	50.3762833 -3.4943833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT21	Mixture of sand, shell, gravel, pebbles and cobbles.	GT21_S1_Img.007	50.3762166 -3.4947499	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT21	Possible heavily silted bedrock. Alcyonium digitatum.	GT21_S1_Img.008	50.3761666 -3.4950166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT21	Mixture of possible heavily silted bedrock with sand, mud and empty shells. Cellaria, Nemertesia, Urticina felina and Antedon bifida.	GT21_S1_Img.009	50.37615 -3.4950833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT21	A mixture of fine slightly muddy sand and coarser sand. Ophiura present.	GT21_S1_Img.010	50.3760666 -3.4955	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT21	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21_S1_Img.011	50.3759333 -3.4963333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT21	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21_S1_Img.012	50.3758 -3.4972	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
26/09/2013	GT21	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21_S1_Img.013	50.37575 -3.4975666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT13	Sandy with some empty shells. No fauna observed	GT13_S1_Img.002	50.4525666 -3.50675	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT13	Sandy with some empty shells. Asterias rubens observed	GT13_S1_Img.003	50.4526166 -3.5064499	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT13	Sandy with some empty shells. Asterias rubens and Ophiura sp observed	GT13_S1_Img.004	50.4526666 -3.5062333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
04/10/2013	GT13	Sandy with some empty shells. Asterias rubens observed	GT13_S1_Img.005	50.4528 -3.5055499	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT13	Sandy with some empty shells. No fauna observed	GT13_S1_Img.006	50.4529333 -3.5047166	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT13	Sandy with some empty shells. No fauna observed	GT13_S1_Img.007	50.4530166 -3.5042666	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT13	Sandy with some empty shells. No fauna observed	GT13_S1_Img.008	50.4530333 -3.5040833	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT13	Sandy with some empty shells. No fauna observed	GT13_S1_Img.009	50.4530666 -3.5039333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT13	Sandy with some empty shells. No fauna observed	GT13_S1_lmg.010	50.4530833 -3.5036999	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT13	Sandy with some empty shells. No fauna observed	GT13_S1_Img.011	50.4531 -3.5036333	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT01	Mostly pebbles and gravel with some sand and mud. Spirobranchus sp observed	GT01_S1_Img.002	50.4584666 -3.4782833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT01	Mostly pebbles and gravel with some sand and mud. Spirobranchus sp observed	GT01_S1_Img.003	50.45855 -3.4783166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT01	Mostly pebbles and gravel with some sand and mud. Spirobranchus sp observed	GT01_S1_Img.004	50.4586166 -3.4783666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT01	Mostly pebbles and gravel with some cobbles, sand and mud. Spirobranchus sp and hydroid/bryozoan turf observed	GT01_S1_Img.005	50.4586666 -3.4784166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT01	Mostly pebbles and gravel with some cobbles, sand and mud. Spirobranchus sp observed	GT01_S1_Img.006	50.4587666 -3.47845	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT01	Mostly pebbles and gravel with some sand and mud. Spirobranchus sp observed	GT01_S1_Img.007	50.4588166 -3.4784833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT01	Mostly pebbles and gravel with some sand and mud. Spirobranchus sp and Cancer pagarus observed. Tyre also present	GT01_S1_Img.008	50.4588333 -3.4784833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT01	Mostly pebbles and gravel with some cobbles, sand and mud. Spirobranchus sp observed	GT01_S1_Img.009	50.4589166 -3.4784666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT01	Mostly pebbles and gravel with some	GT01_S1_Img.010	50.4590166	A5.1 - Subtidal Coarse	Sublittoral coarse sediment	SS.SCS

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
		cobbles, sand and mud. Spirobranchus sp observed	-	-3.47845	Sediment	(unstable cobbles and pebbles, gravels and coarse sands)	
04/10/2013	GT01	Mostly pebbles and gravel with some cobbles, sand and mud. Spirobranchus sp observed	GT01_S1_lmg.011	50.45915 -3.4784666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT01	Mostly pebbles and gravel with some cobbles, sand and mud. Spirobranchus sp observed	GT01_S1_Img.012	50.45925 -3.4783833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT11	Half of the still is slightly sandy bedrock and the other half is sand with some empty shell. Nemertesia anteninna, Spirobranchus sp and Hydroid/bryozoan turf observed	GT11_S1_Img.002	50.4542333 -3.4908166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT11	Possible bedrock covered by some sand and empty shell. Nemertesia anteninna and Asterias rubens observed	GT11_S1_Img.003	50.45425 -3.4907666	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT11	Mixture of sand, pebbles, cobbles and empty shell. Spirobranchus sp present	GT11_S1_Img.004	50.4542666 -3.4906833	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT11	Staggered bedrock and possibly large boulders with some sand and empty shell. Spirobranchus sp and hydroid/bryozoan turf observed	GT11_S1_Img.005	50.4542833 -3.4906333	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT11	Staggered silted bedrock covered with some empty shell. Nemertesia anteninna and porifera present	GT11_S1_Img.006	50.4543 -3.4905666	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT11	Some bedrock, sand and empty shell. Nemertesia antennina and Alcyonium digitatum observed	GT11_S1_Img.007	50.4543166 -3.4904999	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT11	Mixture of sand, shell, gravel, pebbles and cobbles. Spirobranchus sp present	GT11_S1_Img.008	50.4543333 -3.4904666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT11	Mixture of sand, shell, gravel and pebbles. Spirobranchus sp present	GT11_S1_Img.009	50.4543333 -3.4904166	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT11	Mixture of sand, shell, gravel, pebbles and cobbles. Spirobranchus sp present	GT11_S1_Img.010	50.4543333 -3.4903666	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT11	Mixture of sand, shell, gravel, pebbles and cobbles. Spirobranchus sp present	GT11_S1_Img.011	50.4543666 -3.4902	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
04/10/2013	GT04	Muddy sand with some empty shell. No fauna observed	GT04_S1_Img.002	50.4518 -3.4726833	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT04	Muddy sand with some empty shell.	GT04_S1_Img.003	50.4518166 -3.4726166	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT04	Muddy sand with some empty shell and gravel. No fauna observed	GT04_S1_Img.004	50.4518333 -3.4725333	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT04	Muddy sand with some empty shell. No fauna observed	GT04_S1_Img.005	50.4518666 -3.4724499	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT04	Muddy sand with some empty shell.	GT04_S1_Img.006	50.4518833 -3.4724333	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT04	Muddy sand with some empty shell. No fauna observed	GT04_S1_Img.007	50.4519166 -3.47235	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT04	Muddy sand with some empty shell. No fauna observed	GT04_S1_Img.008	50.45195 -3.4722666	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT04	Muddy sand with some empty shell. No fauna observed	GT04_S1_Img.009	50.4519833 -3.4721499	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT04	Mixture of muddy sand, empty shell and cobbles. Spirobranchus sp observed.	GT04_S1_Img.010	50.4520166 -3.4720333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT04	Mixture of muddy sand, empty shell and cobbles. Spirobranchus sp observed.	GT04_S1_Img.011	50.4520666 -3.4718999	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT04	Mixture of muddy sand, empty shell and cobbles. Spirobranchus sp observed.	GT04_S1_Img.012	50.4521166 -3.4717666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT04	Mixture of muddy sand and empty shell. Spirobranchus sp observed.	GT04_S1_Img.013	50.4521333 -3.4716833	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT04	Muddy sand with some empty shell. Spirobranchus sp and Porifera observed.	GT04_S1_Img.014	50.4521833 -3.47155	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT04	Mixture of muddy sand, empty shell and cobbles. Spirobranchus sp observed.	GT04_S1_Img.015	50.45225 -3.4714333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT04	Mixture of muddy sand, empty shell and pebbles. Spirobranchus sp observed.	GT04_S1_Img.016	50.4522833 -3.4713333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT04	Mixture of muddy sand, empty shell, cobbles and pebbles. Spirobranchus sp, hydroid/bryozoan turf and Porifera observed.	GT04_S1_Img.017	50.4523 -3.4712999	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT04	Mixture of muddy sand, empty shell and cobbles. Spirobranchus sp observed.	GT04_S1_Img.018	50.4523666 -3.4711166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT04	Mixture of muddy sand, empty shell and cobbles. Hydroid/bryozoan turf observed.	GT04_S1_Img.019	50.4524166 -3.4710666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
04/10/2013	GT04	Heavily silted bedrock with some empty shell. Sponge#1, Porifera and hydroid/bryozoan turf present	GT04_S1_Img.020	50.4524666 -3.4709833	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT04	Heavily silted bedrock with some empty shell. Asterias rubens and Porifera observed	GT04_S1_Img.021	50.4524833 -3.4709666	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT04	Mixture of muddy sand, empty shell, cobbles and pebbles. Spirobranchus sp and Asterias rubens present	GT04_S1_Img.022	50.45255 -3.4708666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT04	Muddy sand with some empty shell. No fauna observed	GT04_S1_Img.023	50.4526 -3.4707499	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT04	Mixture of muddy sand, empty shell, cobbles and pebbles. Spirobranchus sp observed	GT04_S1_Img.024	50.4526333 -3.4706833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT04	Mixture of muddy sand, empty shell and pebbles. Botryllus schlosseri, Portunidae, Inachus sp and Porifera present. Rubber glove and tyre also observed	GT04_S1_Img.025	50.4527833 -3.47045	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT04	Mixture of muddy sand, empty shell and pebbles. Spirobranchus sp observed.	GT04_S1_Img.026	50.4528 -3.4704166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT04	Silted bedrock with a mixture of muddy sand and empty shell. Hydroid/bryozoan turf and Spirobranchus sp observed	GT04_S1_Img.027	50.45285 -3.4702999	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT04	Muddy sand with some empty shell. Spirobranchus sp observed.	GT04_S1_Img.028	50.4529166 -3.4701333	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT04	Muddy sand with some empty shell. Asterias rubens and Antedon bifida present	GT04_S1_Img.029	50.4530166 -3.4698999	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT04	Mixture of muddy sand, empty shell and cobbles. Spirobranchus sp and Antedon bifida observed	GT04_S1_Img.030	50.45315 -3.4695999	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT04	Muddy sand with some empty shell. Porifera, Antedon bifida and Asterias rubens observed	GT04_S1_Img.031	50.4532 -3.4694333	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT04	Mixture of muddy sand, empty shell and cobbles. Asterias rubens and Antedon bifida observed	GT04_S1_Img.032	50.4532833 -3.4692	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_Img.002	50.4510166 -3.4827833	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_Img.003	50.4510166 -3.4827333	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
04/10/2013	GT12	Sand with some empty shell. Hydoird/bryozoan turf observed	GT12_S1_Img.004	50.4510333 -3.4826499	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_Img.005	50.45105 -3.4825333	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_Img.006	50.45105 -3.4824999	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_Img.007	50.4510333 -3.4824166	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_Img.008	50.4510333 -3.4823666	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_Img.009	50.4510333 -3.4822666	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_Img.010	50.4510166 -3.4822333	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_Img.011	50.4510166 -3.4821666	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_Img.012	50.4510333 -3.4821666	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_Img.013	50.45105 -3.4821333	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_Img.014	50.45105 -3.4821	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_Img.015	50.45105 -3.4820666	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_lmg.016	50.45105 -3.4820333	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT12	Bedrock covered by sand and some empty shell. Cancer pagurus, Porifera and Spirobranchus sp observed	GT12_S1_Img.017	50.45105 -3.4819999	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_Img.018	50.45105 -3.4819999	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT12	Cannot see the seabed or determine sediment type.	GT12_S1_lmg.019	50.4510333 -3.4818833			
04/10/2013	GT12	Sand with some empty shell. No fauna observed.	GT12_S1_lmg.020	50.4511 -3.4815833	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT15	Bedrock covered with some sand and empty shell. Rhodophyta and Esperiopsis fucorum	GT15_S1_lmg.002	50.3641833 -3.50915	A4.2 - Moderate Energy Circalittoral	Echinoderms and crustose communities	CR.MCR.EcCr

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
		observed			Rock	, , ,	
04/10/2013	GT15	Bedrock covered with some sand and empty shell.	GT15_S1_Img.003	50.3642166 -3.5091166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT15	Bedrock covered with some sand and empty shell.	GT15_S1_Img.004	50.3643 -3.5091	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT15	Bedrock covered with some sand and empty shell.	GT15_S1_Img.005	50.3644333 -3.5092	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT15	Bedrock covered with some sand and empty shell.	GT15_S1_Img.006	50.3644333 -3.5092166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT15	Bedrock covered with some sand and empty shell.	GT15_S1_Img.007	50.3644833 -3.5092333	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT15	Bedrock covered with some sand and empty shell.	GT15_S1_Img.008	50.3646166 -3.5093666	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT15	Bedrock covered with some sand and empty shell.	GT15_S1_Img.009	50.3646666 -3.50945	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT15	Cannot see the seabed or determine sediment type.	GT15_S1_Img.010	50.36475 -3.5095166			
04/10/2013	GT15	Bedrock covered with some sand and empty shell.	GT15_S1_Img.011	50.36475 -3.5094999	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT15	Cannot see the seabed or determine sediment type.	GT15_S1_Img.012	50.3647666 -3.5095			
04/10/2013	GT15	Bedrock covered with some sand and empty shell.	GT15_S1_Img.013	50.3647833 -3.5095166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT15	Bedrock covered with some sand and empty shell.	GT15_S1_Img.014	50.3648166 -3.5095166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT15	Bedrock covered with some sand and empty shell.	GT15_S1_Img.015	50.3648166 -3.5095166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT21B	A mixture of fine slightly muddy sand and	GT21B_S1_Img.002	50.3757666	A5.4 - Subtidal Mixed	Sublittoral mixed sediment	SS.SMx

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
	·	coarser sand. No fauna.	·	-3.4946833	Sediment	, , ,	
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.003	50.3757666 -3.4946499	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.004	50.3757666 -3.4946	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.005	50.3757666 -3.4945166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.006	50.3757833 -3.4944833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.007	50.3758 -3.4944666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.008	50.3758166 -3.4944333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.009	50.3758166 -3.4944333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.010	50.37585 -3.4944166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.011	50.3758833 -3.49445	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.012	50.3759166 -3.4944499	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.013	50.3759333 -3.4944166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.014	50.37595 -3.4943999	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.015	50.37595 -3.49435	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.016	50.37595 -3.4943333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.017	50.37595 -3.4943	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	A mixture of fine slightly muddy sand and coarser sand. No fauna.	GT21B_S1_Img.018	50.37595 -3.4942666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT21B	Possible bedrock covered by sand and mud and heavily silted. Cellaria,	GT21B_S1_Img.019	50.3759666 -3.49425	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT21B	Possible bedrock covered by sand and mud	GT21B_S1_Img.020	50.3759833	A4.2 - Moderate	Echinoderms and crustose	CR.MCR.EcCr

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
	·	and heavily silted. Cellaria,	·	-3.4942333	Energy Circalittoral Rock	communities	
04/10/2013	GT21B	Possible bedrock covered by sand and mud and heavily silted. Necora puber present.	GT21B_S1_Img.021	50.3759833 -3.4941999	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT21B	Possible bedrock covered by sand and mud and heavily silted. Alcyonium digitatum present.	GT21B_S1_Img.022	50.376 -3.4941833	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT21B	Possible bedrock covered by sand and mud and heavily silted. Porifera present.	GT21B_S1_Img.023	50.376 -3.49415	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT21B	Possible bedrock covered by sand and mud and heavily silted. Cellaria,	GT21B_S1_Img.024	50.3760166 -3.4941333	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT21B	Possible bedrock covered by sand and mud and heavily silted. Porifera present.	GT21B_S1_Img.025	50.3760166 -3.4941333	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT21B	Possible bedrock covered by sand and mud and heavily silted. Necora puber present.	GT21B_S1_Img.026	50.37605 -3.4940499	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT21B	Possible bedrock covered by sand and mud and heavily silted. Necora puber, Cellaria	GT21B_S1_Img.027	50.3760333 -3.4939666	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT21B	Possible bedrock covered by sand and mud and heavily silted. Necora puber present.	GT21B_S1_Img.028	50.3760333 -3.4938666	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT21B	Possible bedrock covered by sand and mud and heavily silted. No fauna.	GT21B_S1_Img.029	50.3760333 -3.4938333	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT21B	Cannot see the seabed or determine sediment type.	GT21B_S1_Img.030	50.37605 -3.4938166			
04/10/2013	GT21B	Cannot see the seabed or determine sediment type.	GT21B_S1_Img.031	50.37605 -3.4937666			
04/10/2013	GT21B	Mixture of possible heavily silted bedrock with sand, mud and empty shells. Cellaria present.	GT21B_S1_Img.032	50.3760833 -3.4937166	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT03_A1	Mixture of sand, mud, pebbles and cobbles, heavily silted. Spirobranchus sp and hydroid/bryozoan turf present	GT03_A1_S1_Img.002	50.4031 -3.4897666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
04/10/2013	GT03_A1	Mixture of sand, mud pebbles and cobbles, heavily silted. Cellaria sp, Spirobranchus sp and hydroid/bryozoan turf present	GT03_A1_S1_Img.003	50.4031 -3.4896833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A1	Mixture of sand, mud pebbles and cobbles, possibly with some heavily silted bedrock. Cellaria sp, Spirobranchus sp and Hydroid/bryozoan turf.	GT03_A1_S1_Img.004	50.4031166 -3.4895999	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A1	Mixture of sand, mud pebbles and cobbles, with small boulders, heavily silted. Antedon bifida and Spirobranchus sp present	GT03_A1_S1_Img.005	50.4031166 -3.4895499	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A1	Mixture of sand, mud, pebbles and cobbles, heavily silted. Antedon bifida and Necora puber observed	GT03_A1_S1_Img.006	50.4031166 -3.4894833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A1	Possible bedrock covered by sand and mud and heavily silted. Cellaria sp and large number of colourful Antedon bifida observed	GT03_A1_S1_Img.007	50.4031 -3.4893999	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT03_A1	Possible bedrock covered by sand and mud and heavily silted. Cellaria sp and large number of colourful Antedon bifida observed	GT03_A1_S1_Img.008	50.4031 -3.4893333	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT03_A1	Possible bedrock covered by sand and mud and heavily silted. Porifera and some colourful Antedon bifida observed	GT03_A1_S1_Img.009	50.4031166 -3.4892166	A5.2 - Subtidal Sand	Subtidal sands and muddy sands	SS.SSa
04/10/2013	GT03_A1	Possible bedrock covered by sand and mud with some cobbles and pebbles, heavily silted. Cellaria sp and Antedon bifida present	GT03_A1_S1_Img.010	50.4031 -3.4891166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A1	Mixture of possible boulders with sand, mud, gravel, pebbles and cobbles, heavily silted. Porifera and hydroid/bryozoan turf observed	GT03_A1_S1_Img.011	50.4031166 -3.4888833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A1	Mixture of possible boulders with sand, mud, pebbles and cobbles, heavily silted. Porifera, Cellaria sp and Spirobranchus sp observed	GT03_A1_S1_Img.012	50.4031166 -3.4888499	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A1	Mixture of sand, mud, pebbles and cobbles, heavily silted. Spirobranchus sp observed	GT03_A1_S1_Img.013	50.4031166 -3.4887166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A1	Mixture of sand, mud, pebbles and cobbles, heavily silted. Spirobranchus sp and hydroid/bryozoan turf observed	GT03_A1_S1_Img.014	50.4031333 -3.48865	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A1	Mixture of sand, mud, pebbles, empty shells and cobbles, heavily silted. Spirobranchus sp and hydroid/bryozoan turf observed	GT03_A1_S1_Img.015	50.40315 -3.4885	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A1	Mixture of sand, mud, pebbles and empty	GT03_A1_S1_Img.016	50.40315	A5.4 - Subtidal Mixed	Sublittoral mixed sediment	SS.SMx

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
		shells, heavily silted. Crepidula fornicata, Spirobranchus sp and hydroid/bryozoan turf observed		-3.4883499	Sediment		
04/10/2013	GT03_A1	Mixture of sand, mud, pebbles and empty shells, heavily silted. Crepidula fornicata, Spirobranchus sp and hydroid/bryozoan turf observed	GT03_A1_S1_Img.017	50.40315 -3.48825	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A1	Possible boulders with a mixture of sand, mud, cobbles and empty shells, heavily silted. Hydroid/bryozoan turf observed	GT03_A1_S1_Img.018	50.4031333 -3.4881499	A5.1 - Subtidal Coarse Sediment	Sublittoral coarse sediment (unstable cobbles and pebbles, gravels and coarse sands)	SS.SCS
04/10/2013	GT03_A1	Bedrock covered by some sand and heavily silted. Spirobranchus sp and hydroid/bryozoan turf present	GT03_A1_S1_Img.019	50.4031333 -3.4881	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT03_A1	Bedrock covered by some sand and pebbles, heavily silted. Nemertesia antennina, Cellaria sp, Spirobranchus sp and hydroid/bryozoan turf present	GT03_A1_S1_Img.020	50.4031166 -3.4879833	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr
04/10/2013	GT03_A1	Possible bedrock covered with sand plus some empty shells and cobbles, heavily silted. Rope also possibly present. Cellaria sp, hydroid/bryozoan turf and Porifera observed	GT03_A1_S1_Img.021	50.4031166 -3.4879333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A1	Mixture of sand, mud, empty shells and cobbles, heavily silted. Cellaria sp, Porifera and hydroid/bryozoan turf observed	GT03_A1_S1_Img.022	50.4031166 -3.4879	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Muddy sand with some pebbles and cobbles, heavily silted. Hydroid/bryozoan turf present	GT03_A2_S1_Img.002	50.40345 -3.4869	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SCS
04/10/2013	GT03_A2	Mixture of sand, mud, cobbles and pebbles, heavily silted. Possible rope seen. Hydroid/bryozoan turf present	GT03_A2_S1_Img.003	50.4034666 -3.4869	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Mixture of sand, mud, cobbles and pebbles, heavily silted. Pagurus bernhardus, Spirobranchus sp and Hydroid/bryozoan turf present	GT03_A2_S1_Img.004	50.4035 -3.4868833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Mixture of sand, mud, empty shells, cobbles and pebbles, heavily silted. Cellaria sp, Nemertesia anteninna and Spirobranchus sp present	GT03_A2_S1_Img.005	50.4035166 -3.48685	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Mixture of sand, mud, empty shells, cobbles and pebbles, heavily silted. Nemertesia anteninna and Spirobranchus sp present	GT03_A2_S1_Img.006	50.4035333 -3.4868166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
04/10/2013	GT03_A2	Mixture of sand, mud, empty shells and cobbles, heavily silted. No fauna observed	GT03_A2_S1_Img.007	50.40355 -3.4867	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Mixture of sand, mud, empty shells, pebbles and cobbles, heavily silted. Hydroid/bryozoan turf and Spirobranchus sp present	GT03_A2_S1_Img.008	50.40355 -3.4866833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Mixture of sand, mud, pebbles and cobbles, heavily silted. No fauna observed	GT03_A2_S1_Img.009	50.4035333 -3.4865833	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SCS
04/10/2013	GT03_A2	Mixture of sand, mud, empty shell, pebbles and cobbles, heavily silted. Spirobranchus sp and hydroid/bryozoan turf observed	GT03_A2_S1_Img.010	50.4035333 -3.4865166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Possible bedrock covered by sand, mud and pebbles, heavily silted. Cellaria sp, Nemertesia anteninna and hydroid/bryozoan turf observed	GT03_A2_S1_Img.011	50.40355 -3.4864333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Muddy sand with empty shell. No fauna observed.	GT03_A2_S1_Img.012	50.40355 -3.4863833	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SCS
04/10/2013	GT03_A2	Muddy sand with some shell and cobbles, heavily silted. Porifera, Cellaria sp and hydroid/bryozoan turf observed	GT03_A2_S1_Img.013	50.4035666 -3.4863166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Mixture of muddy sand, cobbles and pebbles, heavily silted. Porifera and hydroid/bryozoan turf present	GT03_A2_S1_Img.014	50.4035666 -3.4862666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Mixture of muddy sand, empty shell, pebbles, cobbles and gravel, heavily silted. Pagurus bernhardus, Necora puber and Crepidula fornicata observed	GT03_A2_S1_Img.015	50.4036 -3.4861833	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Mixture of muddy sand, empty shell, pebbles, cobbles and gravel, heavily silted. No fauna observed	GT03_A2_S1_Img.016	50.4036 -3.48615	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Possible bedrock with a mixture of muddy sand, gravel, cobbles and pebbles, heavily silted.Porifera, Cellaria sp, Nemertesia anteninna and Spirobranchus sp present	GT03_A2_S1_Img.017	50.4036166 -3.4860499	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Mixture of muddy sand, gravel, pebbles, cobbles and empty shell. Nemertesia anteninna, Spirobranchus sp and hydroid/bryozoan turf	GT03_A2_S1_Img.018	50.40365 -3.4860166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Possible bedrock covered by muddy sand and empty shells. Cellaria sp and hydroid/bryozoan turf present	GT03_A2_S1_Img.019	50.4036833 -3.4859499	A4.2 - Moderate Energy Circalittoral Rock	Echinoderms and crustose communities	CR.MCR.EcCr

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
04/10/2013	GT03_A2	Boulders with a mixture of sand, mud, empty shell, pebbles and cobbles. Spirobranchus sp observed	GT03_A2_S1_Img.020	50.4037166 -3.4859166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Boulders with a mixture of sand, mud, empty shell, pebbles and cobbles. Porifera and hydroid/bryozoan turf observed	GT03_A2_S1_Img.021	50.4037333 -3.4859	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Mixture of muddy sand, empty shell, gravel, pebbles and cobbles. Metridium senile observed	GT03_A2_S1_Img.022	50.4037666 -3.4858166	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Mixture of muddy sand, empty shell and cobbles. Asterias rubens, Porifera and hydroid/bryozoan turf observed	GT03_A2_S1_Img.023	50.4037833 -3.48575	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Mixture of muddy sand, empty shell, pebbles and cobbles. Asterias rubens, Porifera and hydroid/bryozoan turf observed	GT03_A2_S1_Img.024	50.4037833 -3.4857333	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Mixture of muddy sand, empty shell, gravel, pebbles and cobbles. No fauna observed	GT03_A2_S1_Img.025	50.4038166 -3.4856666	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Boulders with a mixture of muddy sand, empty shell, pebbles and cobbles. Necora puber, Spirobranchus sp and hydroid/bryozoan turf observed	GT03_A2_S1_Img.026	50.4038333 -3.48565	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Mixture of muddy sand, empty shell, pebbles and cobbles. Nemertesia anteninna, Pagurus bernhardus and hydroid/bryozoan turf present	GT03_A2_S1_Img.027	50.40385 -3.4856	A5.4 - Subtidal Mixed Sediment	Sublittoral mixed sediment	SS.SMx
04/10/2013	GT03_A2	Muddy sand with some empty shell. Asterias rubens present	GT03_A2_S1_Img.028	50.4038666 -3.4855666	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SCS
04/10/2013	GT38	Fine slightly muddy sand. No fauna.	GT38_S1_Img.002	50.4043166 -3.5015666	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT38	Fine slightly muddy sand. No fauna.	GT38_S1_Img.003	50.40435 -3.5015166	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT38	Fine slightly muddy sand. No fauna.	GT38_S1_Img.004	50.4043666 -3.5014666	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT38	Fine slightly muddy sand. No fauna.	GT38_S1_Img.005	50.4043666 -3.5012999	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT38	Fine slightly muddy sand. No fauna.	GT38_S1_Img.006	50.4043666 -3.5012999	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT38	Fine slightly muddy sand. No fauna.	GT38_S1_Img.007	50.40443 -3.5012	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa

Date	Video Sample Ref	Brief Habitat Description	Still Sample Ref	Lat/Long	Biotope (EUNIS code)	Classification (MNCR descriptor)	Biotope Key (MNCR Code)
04/10/2013	GT38	Fine slightly muddy sand. No fauna.	GT38_S1_Img.008	50.4045 -3.50115	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT38	Fine slightly muddy sand. No fauna.	GT38_S1_Img.009	50.40457 -3.5011	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa
04/10/2013	GT38	Fine slightly muddy sand. No fauna.	GT38_S1_Img.010	50.40463 -3.501	A5.2 - Subtidal Sand	Sublittoral sands and muddy sands	SS.SSa

### C. Video species list

Species list for video samples.

Taxa

**SPONGES** 

Porifera

Ciocalypta penicillus

Cliona

Cliona celata

Esperiopsis fucorum

Suberites ficus

HYDROIDS, CORALS, JELLYFISH, ANEMONES

Calliactis parasitica

Alcyonium digitatum

Actiniaria

Caryophyllia smithii

Cereus pedunculatus

Cerianthus Iloydii

Corynactis viridis

Eunicella verrucosa

Metridium senile

Nemertesia anteninna

Peachia cylindrica

Sagartia elegans

Sagartia troglodytes

Sertularia

Tubulariidae

Urticina felina

**SEGMENTED WORMS** 

Serpulidae

Laetmonice hystrix

**CRUSTACEANS** 

Brachyura

Cancer pagurus

Cirripedia

Homarus gammarus

Inachus

Liocarcinus

Maja brachydactyla

Ebalia

Necora puber

Paguridae

Pagurus bernhardus

**MOLLUSCS** 

Pecten maximus

Crepidula fornicata

Ensis

Sepia officinalis

BRYOZOA

Alcyonidium diaphanum

Taxa

Cellaria

SEA STARS, URCHINS, SEA CUCUMBERS

Antedon bifida

Ophiura

Asterias rubens

FISH

Callionymus

Actinopterygii

Pleuronectes platessa

Scyliorhinidae

**ASCIDIAN** 

Botrylloides leachii

Botryllus schlosseri

Didemnidae

**ALGAE** 

Corallinaceae

Fucus serratus

Phyllophora crispa

Rhodophyta

Saccharina latissima

Ulva



#### **About us**

Cefas is a multi-disciplinary scientific research and consultancy centre providing a comprehensive range of services in fisheries management, environmental monitoring and assessment, and aquaculture to a large number of clients worldwide.

We have more than 500 staff based in 2 laboratories

our own ocean-going research vessel, and over 100 years of fisheries experience.

We have a long and successful track record in delivering high-quality services to clients in a confidential and impartial manner. (www.cefas.defra.gov.uk)

Cefas Technology Limited (CTL) is a wholly owned subsidiary of Cefas specialising in the application of Cefas technology to specific customer needs in a cost-effective and focussed manner.

CTL systems and services are developed by teams that are experienced in fisheries, environmental management and aquaculture, and in working closely with clients to ensure that their needs are fully met. (www.cefastechnology.co.uk)

## **Customer focus**

With our unique facilities and our breadth of expertise in environmental and fisheries management, we can rapidly put together a multi-disciplinary team of experienced specialists, fully supported by our comprehensive inhouse resources.

Our existing customers are drawn from a broad spectrum with wide ranging interests. Clients include:

- international and UK government departments
- the European Commission
- the World Bank
- Food and Agriculture Organisation of the United Nations (FAO)
- oil, water, chemical, pharmaceutical, agro-chemical, aggregate and marine industries
- non-governmental and environmental organisations
- regulators and enforcement agencies
- local authorities and other public bodies

We also work successfully in partnership with other organisations, operate in international consortia and have several joint ventures commercialising our intellectual property

Head office

Centre for Environment, Fisheries & Aquaculture Science Science

Pakefield Road, Lowestoft, Suffolk NR33 0HT UK

Tel +44 (0) 1502 56 2244 Fax +44 (0) 1502 51 3865

Web www.cefas.defra.gov.u

Centre for Environment, Fisheries & Aquaculture

Barrack Road, The Nothe Weymouth, DT4 8UB

Tel +44 (0) 1305 206600 Fax +44 (0) 1305 206601

# **Further information**

Natural England evidence can be downloaded from our **Access to Evidence Catalogue**. For more information about Natural England and our work see **Gov.UK**. For any queries contact the Natural England Enquiry Service on 0300 060 3900 or e-mail **enquiries@naturalengland.org.uk**.

## Copyright

This report is published by Natural England under the Open Government Licence - OGLv3.0 for public sector information. You are encouraged to use, and reuse, information subject to certain conditions. For details of the licence visit **Copyright**. Natural England photographs are only available for non-commercial purposes. If any other information such as maps or data cannot be used commercially this will be made clear within the report.

## © Natural England and other parties 2016

Report number RP1489 ISBN 978-1-78354-311-3

First published on Natural England's Access to Evidence Catalogue 10 May 2016